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TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 12	Match STN Content and Features to Your Information Needs, Quickly and Conveniently
NEWS	3	JAN 25	Annual Reload of MEDLINE database
NEWS	4	FEB 16	STN Express Maintenance Release, Version 8.4.2, Is Now Available for Download
NEWS	5	FEB 16	Derwent World Patents Index (DWPI) Revises Indexing of Author Abstracts
NEWS	6	FEB 16	New FASTA Display Formats Added to USGENE and PCTGEN
NEWS	7	FEB 16	INPADOCDB and INPAFAMDB Enriched with New Content and Features
NEWS	8	FEB 16	INSPEC Adding Its Own IPC codes and Author's E-mail Addresses
NEWS	9	APR 02	CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases
NEWS	10	APR 02	PATDPAFULL: Application and priority number formats enhanced
NEWS	11	APR 02	DWPI: New display format ALLSTR available
NEWS	12	APR 02	New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
NEWS	13	APR 02	EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948
NEWS	14	APR 07	CA/CAPLUS CLASS Display Streamlined with Removal of Pre-IPC 8 Data Fields
NEWS	15	APR 07	50,000 World Traditional Medicine (WTM) Patents Now Available in CAPLUS
NEWS	16	APR 07	MEDLINE Coverage Is Extended Back to 1947

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,  
AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:26:12 ON 07 MAY 2010

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.44

0.44

FILE 'REGISTRY' ENTERED AT 15:27:02 ON 07 MAY 2010

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 MAY 2010 HIGHEST RN 1221639-82-2

DICTIONARY FILE UPDATES: 6 MAY 2010 HIGHEST RN 1221639-82-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

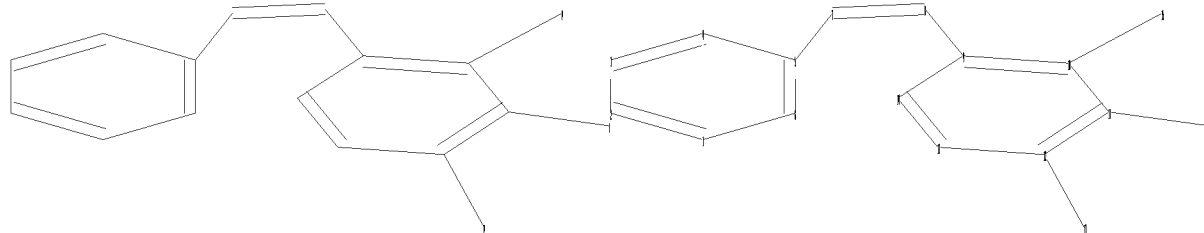
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10-790662 sp with 3f.str



chain nodes :

7 8 15 16 17

ring nodes :

1 2 3 4 5 6 9 10 11 12 13 14

chain bonds :

5-7 7-8 8-9 10-15 11-16 12-17

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-14 10-11 11-12 12-13 13-14

exact bonds :

5-7 7-8 8-9 10-15 11-16 12-17

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-14 10-11 11-12 12-13 13-14

Match level :

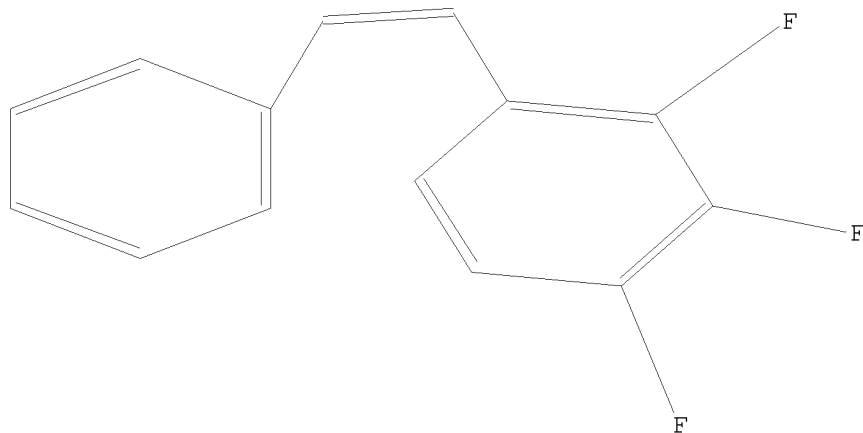
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 15:27:19 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 114 TO ITERATE

100.0% PROCESSED 114 ITERATIONS

9 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1640 TO 2920

PROJECTED ANSWERS: 9 TO 360

L2 9 SEA SSS SAM L1

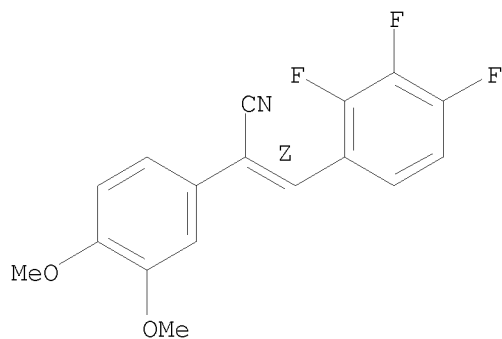
=> d scan

L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzeneacetonitrile, 3,4-dimethoxy- $\alpha$ -(2,3,4-trifluorophenyl)methylene]-, ( $\alpha$ Z)-

MF C17 H12 F3 N O2

Double bond geometry as shown.

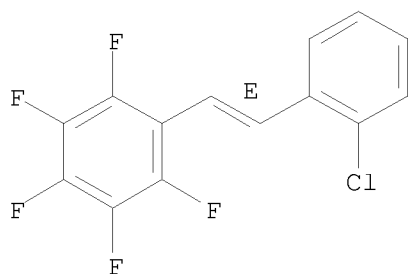


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):8

L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Benzene, [(1E)-2-(2-chlorophenyl)ethenyl]pentafluoro- (9CI)  
 MF C14 H6 Cl F5

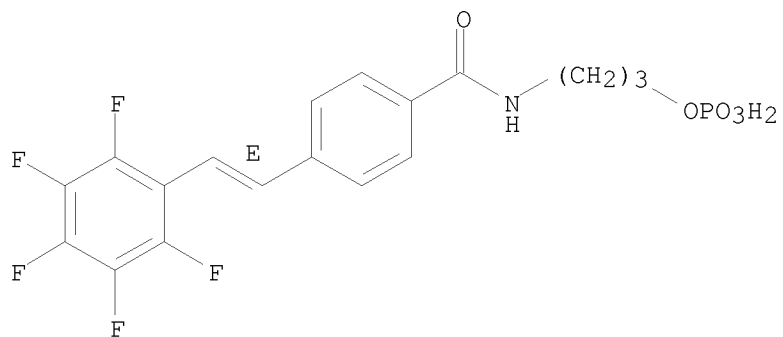
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Benzamide, 4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-N-[3-(phosphonooxy)propyl]-  
 MF C18 H15 F5 N O5 P

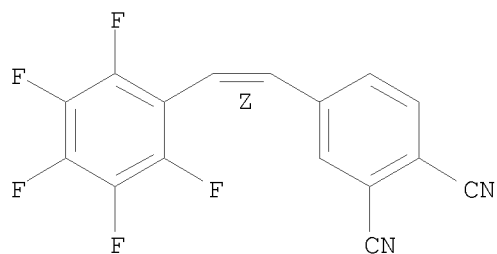
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN 1,2-Benzenedicarbonitrile, 4-[(1Z)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-  
 MF C16 H5 F5 N2

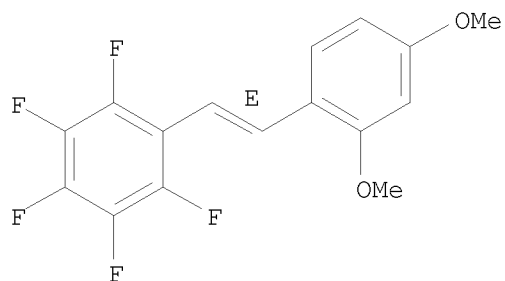
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Benzene, 1-[(1E)-2-(2,4-dimethoxyphenyl)ethenyl]-2,3,4,5,6-pentafluoro-  
 MF C16 H11 F5 O2

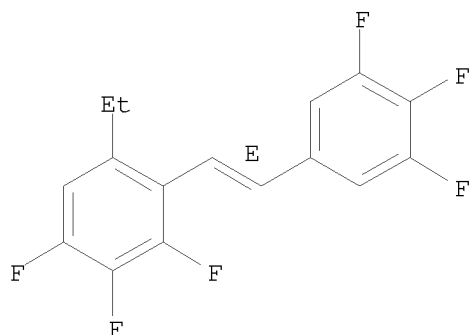
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

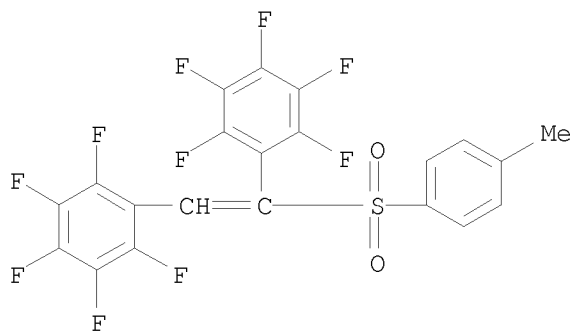
L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Benzene, 1-ethyl-3,4,5-trifluoro-2-[(1E)-2-(3,4,5-trifluorophenyl)ethenyl]-  
 MF C16 H10 F6

Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

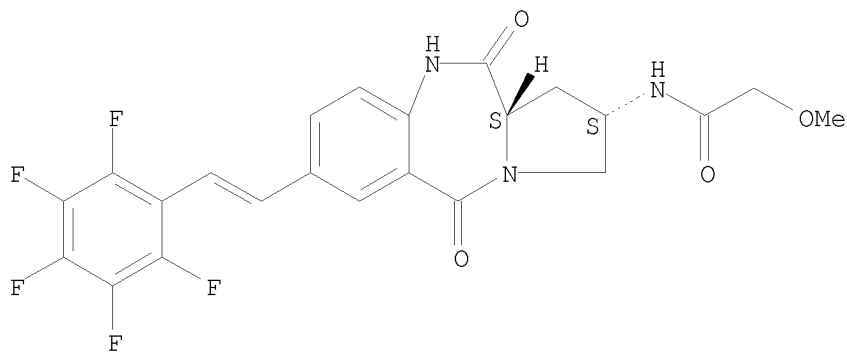
L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Benzene, 1,1'-[1-[(4-methylphenyl)sulfonyl]-1,2-ethenediyl]bis[2,3,4,5,6-pentafluoro- (9CI)  
 MF C21 H8 F10 O2 S



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

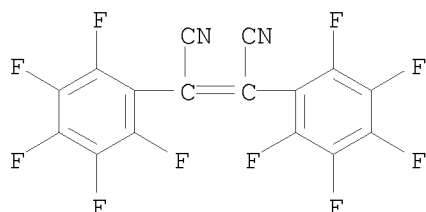
L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Acetamide, N-[(2S,11aS)-2,3,5,10,11,11a-hexahydro-5,11-dioxo-7-[2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-1H-pyrrolo[2,1-c][1,4]benzodiazepin-2-yl]-2-methoxy-  
 MF C23 H18 F5 N3 O4

Absolute stereochemistry.  
 Double bond geometry unknown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 9 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN 2-Butenedinitrile, 2,3-bis(pentafluorophenyl)-, radical ion(1-),  
 vanadium(2+), (2E)- (9CI)  
 MF C16 F10 N2 . 1/2 V  
 CI COM, RIS



● 1/2 V(II) 2+

ALL ANSWERS HAVE BEEN SCANNED

=>

=> fil capl

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

19.11

19.55

FILE 'CAPLUS' ENTERED AT 15:50:43 ON 07 MAY 2010

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FILE COVERS 1907 - 7 May 2010 VOL 152 ISS 20  
FILE LAST UPDATED: 6 May 2010 (20100506/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

Caplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12  
L3 10 L2

=> d ibib abs tot

L3 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2009:411341 CAPLUS  
DOCUMENT NUMBER: 152:229423  
TITLE: Synthesis of all-cis and all-trans  
tetrakis(phenylvinylene)phthalocyanines  
AUTHOR(S): Efimov, Alexander; Sariola, Essi; Lemmetyinen, Helge  
CORPORATE SOURCE: Department of Chemistry and Bioengineering, Tampere  
University of Technology, Tampere, 33101, Finland  
SOURCE: Journal of Porphyrins and Phthalocyanines (2009),  
13(1), 1-13  
CODEN: JPPHFZ; ISSN: 1088-4246  
PUBLISHER: World Scientific Publishing Co. Pte. Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The authors synthesized tetrakis(arylvinylene)phthalocyanines from the  
corresponding phthalonitriles. Substitution of the para-fluorine in the  
pentafluorophenyl ring with an alkoxy group from the solvent occurs during  
the synthesis. This substitution can be suppressed by the addition of zinc  
chloride or tin chloride to the reaction mixture According to <sup>1</sup>H and <sup>19</sup>F  
NMR data, the cis- or trans-configurations of the starting materials are  
retained during condensation; thus the phthalocyanines formed are in  
all-cis or all-trans form. Cis-trans photoisomerization occurs easily for  
phthalonitriles, while phthalocyanines retain their configurations under  
UV beam.  
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2008:1409704 CAPLUS  
DOCUMENT NUMBER: 150:121239  
TITLE: Rhodium-catalyzed anomalous dimerization of styrenes  
involving the cleavage of the ortho C-H bond  
AUTHOR(S): Tobisu, Mamoru; Hyodo, Isao; Onoe, Masahiro; Chatani,  
Naoto  
CORPORATE SOURCE: Frontier Research Base for Global Young Researchers,  
Graduate School of Engineering, Osaka University,



Osaka, Suita, 565-0871, Japan  
 SOURCE: Chemical Communications (Cambridge, United Kingdom)  
 (2008), (45), 6013-6015  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 150:121239  
 AB The dimerization of styrene derivs. in the presence of a rhodium catalyst  
 proceeds to give stilbene derivs., in which the ortho C-H bond of styrenes  
 is cleaved and functionalized.  
 OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
 (3 CITINGS)  
 REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:693746 CAPLUS  
 DOCUMENT NUMBER: 145:314561  
 TITLE: Rh2(OAc)4-catalyzed formation of trans-alkenes from  
 the reaction of aldehydes with perfluorophenyl  
 diazomethane through tellurium ylide  
 AUTHOR(S): Zhu, Shifa; Xing, Chunhui; Pang, Wan; Zhu, Shizheng  
 CORPORATE SOURCE: Key Laboratory of Organofluorine Chemistry, Shanghai  
 Institute of Organic Chemistry, Chinese Academy of  
 Sciences, Shanghai, 20032, Peop. Rep. China  
 SOURCE: Tetrahedron Letters (2006), 47(33), 5897-5900  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 145:314561  
 AB Rh2(OAc)4 can catalyze the formation of perfluorophenyl-containing  
 trans-epoxides (e.g. 89% trans-2-(2-nitrophenyl)-3-  
 (perfluorophenyl)oxirane (1)) from the reactions of perfluorophenyl  
 diazomethane with activated aryl aldehydes through S ylide intermediate  
 using tetrahydrothiophene. In contrast, under the same reaction  
 conditions, trans-alkenes were obtained in excellent yield (e.g. 100 %  
 trans-C6F5CH:CHC6H4OMe-4) through Te ylide intermediates using Bu2Te. The  
 crystal and mol. structures of 1 were determined by x-ray crystallog.  
 OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
 (6 CITINGS)  
 REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:395317 CAPLUS  
 DOCUMENT NUMBER: 142:447237  
 TITLE: Preparation of tricyclic diazepine compounds having  
 leukemia cell proliferation inhibition activity  
 INVENTOR(S): Machii, Daisuke; Umehara, Hiroshi; Yamashita,  
 Yoshinori; Suda, Toshio; Miki, Ichiro; Ambrosi, Horst;  
 Frommann, Sven  
 PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 73 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2005040172	A1	20050506	WO 2004-JP16353	20041028
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:

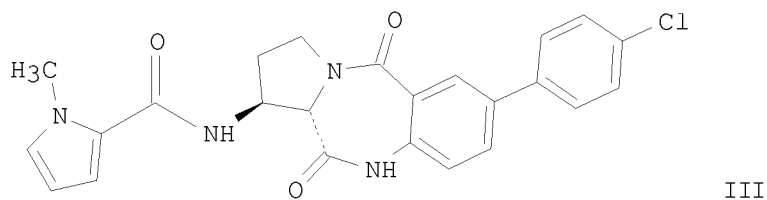
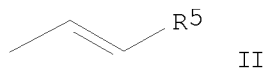
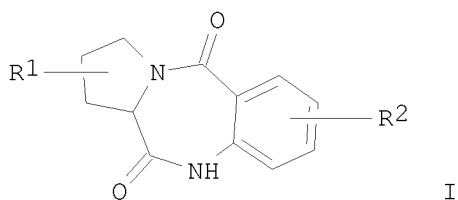
JP 2003-368264

A 20031029

OTHER SOURCE(S):

MARPAT 142:447237

GI



AB Title compds. I [R1 = hydroxy, alkoxy, alkylsulfanyl, etc.; R2 = (un)substituted aryl, (un)substituted heteroaryl, II, etc.; R5 = (un)substituted aryl, (un)substituted heteroaryl, cycloalkyl, etc.] were prepared For example, compound III are prepared from (2S,3S)-Fmoc-3-amino-1-Boc-pyrrolidine-2-carboxylic acid in a multistep process. In leukemia cell proliferation inhibition assays, compound III exhibited the inhibition activity of 99%.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:1024219 CAPLUS

DOCUMENT NUMBER: 142:355028

TITLE: Process for the preparation of  
trans-1-aryl-2-perfluoro or polyfluorophenylethenes as  
photochromic substances with As-involved Wittig  
reaction as key step

INVENTOR(S): Zhu, Shizheng; Zhu, Shifa; Liao, Yuanxi

PATENT ASSIGNEE(S): Shanghai Institute of Organic Chemistry, Chinese  
Academy of Sciences, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 14 pp.  
CODEN: CNXXEV

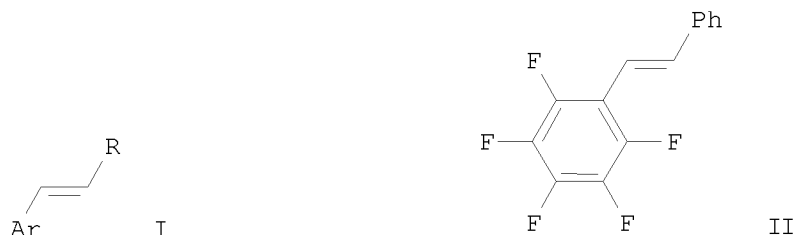
DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1475471	A	20040218	CN 2003-129584	20030627
CN 1266099	C	20060726		
PRIORITY APPLN. INFO.:			CN 2003-129584	20030627
OTHER SOURCE(S):		CASREACT 142:355028; MARPAT 142:355028		
GI				



AB A process for the preparation of trans-1-aryl-2-fluorophenylethenes I [wherein Ar = C6F5, C6F4Cl, C6F4H, C6F3H2, C6F2H3 or C6FH4; R = styryl, (un)substituted Ph], which are useful as organic photochromic substances, were reported. The process comprise (1) condensing perfluoro- or polyfluorobenzaldehydes ArCHO with TsNHNH2 at 0-78°C for 0.5-24 h in solvents such as ethanol or benzene to hydrazones ArCH=NNHTs; (2) converting the hydrazones with NaH at -30 - 30°C for 24-48 h in aprotic solvents into sodium salts; and (3) condensing the salts with aldehyde RCHO in the presence of organometallic catalysts, phase-transfer catalysts (PTC) and Ph3As or trialkylarsines. In the final step above, it was believed that the hydrazone sodium salts were first transformed into aryl diazomethanes and then into carbenes in the presence of PTC and the metal catalysts, resp. The generated carbenes were captured by Ph3As or trialkylarsines in situ leading to arsine ylides, which underwent Wittig olefination with aldehydes to produce alkenes with high E selectivity. The phase transfer catalyst was selected from 15-crown-5, 18-crown-6, Bu4NCl or other quaternary ammonium salt. The metal catalyst was selected from (PPh3)3RhCl, Rh2(OAc)4 or Cu(acac)2. For example, C6F5CHO underwent condensation with TsNHNH2 in ethanol at rt for 24 h (99% yield) followed by reaction with NaH in ether (84% yield). Wittig reaction of the resultant sodium salt with p-nitrobenzaldehyde in the presence of Ph3As, Rh2(OAc)4 and 18-crown-6 in dioxane afforded II (70% yield). I are useful in fluoro-containing conductive organic polymers and organic luminescent materials.

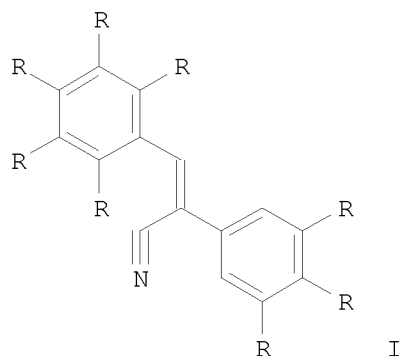
ACCESSION NUMBER: 2004:681567 CAPLUS  
 DOCUMENT NUMBER: 141:200160  
 TITLE: Breast cancer resistance protein (BCRP) inhibitor  
 INVENTOR(S): Yamazaki, Ryuta; Nishiyama, Yukiko; Furuta, Tomio;  
 Matsuzaki, Takeshi; Hatano, Hiroshi; Yoshida, Oh;  
 Nagaoka, Masato; Aiyama, Ritsuo; Hashimoto, Shusuke;  
 Sugimoto, Yoshikazu  
 PATENT ASSIGNEE(S): Kabushiki Kaisha Yakult Honsha, Japan  
 SOURCE: PCT Int. Appl., 91 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004069243	A1	20040819	WO 2004-JP1067	20040203
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004210259	A1	20040819	AU 2004-210259	20040203
AU 2004210259	B2	20081211		
CA 2515174	A1	20040819	CA 2004-2515174	20040203
EP 1591117	A1	20051102	EP 2004-707629	20040203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2004007264	A	20060131	BR 2004-7264	20040203
CN 1744892	A	20060308	CN 2004-80003247	20040203
ZA 2005005988	A	20061227	ZA 2005-5988	20050726
IN 2005DN03346	A	20070413	IN 2005-DN3346	20050727
IN 233129	A1	20090403		
US 20060128636	A1	20060615	US 2005-544064	20050802
US 7371773	B2	20080513		
MX 2005008298	A	20050920	MX 2005-8298	20050804
NO 2005003956	A	20051026	NO 2005-3956	20050825
PRIORITY APPLN. INFO.:			JP 2003-26856	A 20030204
			WO 2004-JP1067	W 20040203

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 141:200160

GI



AB A drug which inhibits BCRPs. It is a breast cancer resistance protein inhibitor which contains as an active ingredient either a diphenylacrylonitrile derivative represented by the following formula (I): (I) {wherein the eight R's are the same or different and each independently represents hydrogen, hydroxy, nitro, amino, acetyl amino (-NHCOCH<sub>3</sub>), cyano (-CN), formyl (-CHO), -COOR<sub>1</sub> (R<sub>1</sub> is hydrogen or C1-4 alkyl), -O(CH<sub>2</sub>)<sub>n</sub>COOR<sub>2</sub> (n is 1 to 7 and R<sub>2</sub> is hydrogen or C1-4 alkyl), -OOCH<sub>2</sub>CH<sub>2</sub>COOR<sub>3</sub> (R<sub>3</sub> is hydrogen, C1-4 alkyl, (Z)-2-(3,4-dimethoxyphenyl)-3-(4-hydroxyphenyl)acrylonitrile, or glycopyranosyl), C1-8 alkoxy, C1-4 alkyl, halogeno, ((C1-4 alkoxy)C1-4 alkoxy)C1-4 alkoxy, C2-8 acyloxy, C2-8 halogenoacyloxy, methylenedioxy, trifluoromethyl, phosphate group (-OP(O)(OH)<sub>2</sub>) or salt thereof, sulfate group (-OSO<sub>3</sub>H) or salt thereof, glycopyranosyl or salt thereof, a glycopyranosyl phosphate or salt thereof, glycopyranosyl sulfate or salt thereof, or piperidinopiperidinocarbonyloxy} or an ester or salt of the derivative

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:248335 CAPLUS

DOCUMENT NUMBER: 140:419464

TITLE: 5'-Tethered Stilbene Derivatives as Fidelity- and Affinity-Enhancing Modulators of DNA Duplex Stability

AUTHOR(S): Dogan, Zeynep; Paulini, Ralph; Stuetz, Jan A. Rojas; Narayanan, Sukunath; Richert, Clemens

CORPORATE SOURCE: Institute for Organic Chemistry, University of Karlsruhe (TH), Karlsruhe, D-76131, Germany

SOURCE: Journal of the American Chemical Society (2004), 126(15), 4762-4763  
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of 5'-linked stilbene-DNA conjugates with different substituents in the distal aromatic ring of the stilbene was prepared, and the effect of the modifications on duplex stability was determined via UV-melting curves. A trimethoxystilbene derivative as a 5'-substituent increases duplex m.p.s. by up to 12.2 °C per modification. With this alkoxystilbene substituent, terminal mismatches in DNA duplexes lower the m.p. by up to 23.4 °C over the perfectly matched control, whereas terminal mismatches in unmodified DNA cause m.p. depressions of no more than 6.1 °C. An aminomethylstilbene substituent linked to an oligopyrrolamide minor groove binder increases the m.p. of an all-A/T decamer by up to 32.7 °C,

thus shifting the m.p. into a range typical for duplexes with statistical G/C-content. An affinity- and selectivity-enhancing effect was also observed when the trimethoxystilbene cap was employed on a small DNA microarray. The phosphoramidite of the trimethoxystilbene can be readily employed in automatic DNA synthesis, facilitating the generation of DNA chips with improved fidelity.

OS.CITING REF COUNT: 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)  
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:42382 CAPLUS  
DOCUMENT NUMBER: 140:128081  
TITLE: Transition metal catalyzed formation of trans alkenes via coupling of aldehydes  
AUTHOR(S): Zhu, Shifa; Liao, Yuanxi; Zhu, Shizheng  
CORPORATE SOURCE: Key Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Shanghai, 200032, Peop. Rep. China  
SOURCE: Organic Letters (2004), 6(3), 377-380  
CODEN: ORLEF7; ISSN: 1523-7060  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 140:128081

AB Rh<sub>2</sub>(OAc)<sub>4</sub> catalyzed the stereoselective formation of trans fluorinated alkenes from aldehydes and pentafluorobenzaldehyde tosylhydrazone salts, which were readily prepared from pentafluorobenzaldehyde using the Bamford-Stevens reaction. A series of pentafluorophenyl-containing alkenes were prepared from aldehydes in moderate to good yields under mild reaction conditions in a one-pot reaction. Thus, 4-BrC<sub>6</sub>H<sub>4</sub>CHO and C<sub>6</sub>F<sub>5</sub>CH:NNHSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Me-4 Na salt in dioxane containing Ph<sub>3</sub>As, Rh<sub>2</sub>(OAc)<sub>4</sub>, and 18-crown-6 reacted at 35° for 6-12 h to give trans-4-BrC<sub>6</sub>H<sub>4</sub>CH:CHC<sub>6</sub>F<sub>5</sub> in 60% yield. This is the first report of coupling two different aldehydes to form exclusively trans alkenes.

OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)  
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:879514 CAPLUS  
DOCUMENT NUMBER: 136:263047  
TITLE: Preparation of  $\alpha$ -free pyrroles with perfluorinated groups at the  $\beta$ -positions  
AUTHOR(S): Uno, Hidemitsu; Inoue, Kentarou; Inoue, Takashi; Fumoto, Yumiko; Ono, Noboru  
CORPORATE SOURCE: Advanced Instrumentation Center for Chemical Analysis, Ehime University, Matsuyama, 790-8577, Japan  
SOURCE: Synthesis (2001), (15), 2255-2258  
CODEN: SYNTBF; ISSN: 0039-7881  
PUBLISHER: Georg Thieme Verlag  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 136:263047

AB Et pyrrole-2-carboxylates bearing trifluoromethyl and/or pentafluorophenyl groups at the  $\beta$ -positions were converted to the corresponding  $\alpha$ -free pyrroles in good yields by reduction with LiAlH<sub>4</sub>, oxidation with MnO<sub>2</sub> and decarbonylation with Pd/C.

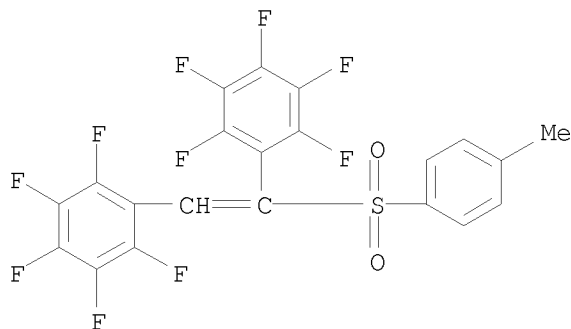
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1987:458571 CAPLUS  
DOCUMENT NUMBER: 107:58571  
ORIGINAL REFERENCE NO.: 107:9717a,9720a  
TITLE: Application of organoelement compounds of the fifth and sixth groups in organic synthesis. Part 44. A facile synthesis of pentafluorophenyl olefins via an arsonium ylide  
AUTHOR(S): Shen, Yanchang; Qiu, Weiming  
CORPORATE SOURCE: Shanghai Inst. Org. Chem., Acad. Sin., Shanghai, Peop. Rep. China  
SOURCE: Synthesis (1987), (1), 65-6  
CODEN: SYNTBF; ISSN: 0039-7881  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 107:58571  
AB Benzaldehydes were treated with C6F5CH:AsPh3(I) to give C6F5CH:CHR1 (R1 = Ph, halophenyl, O2NC6H4, anisyl, styryl, etc.). I was obtained from CH2:AsPh3 and C6F6.

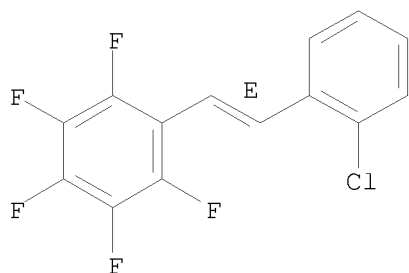
=> d hitstr 9-10

L3 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
IT 405196-65-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of  $\alpha$ -free pyrroles with perfluorinated groups at  $\beta$ -positions)  
RN 405196-65-8 CAPLUS  
CN Benzene, 1,1'-[1-[(4-methylphenyl)sulfonyl]-1,2-ethenediyl]bis[2,3,4,5,6-pentafluoro- (9CI) (CA INDEX NAME)]



L3 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
IT 109384-55-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 109384-55-6 CAPLUS  
CN Benzene, [(1E)-2-(2-chlorophenyl)ethenyl]pentafluoro- (9CI) (CA INDEX NAME)

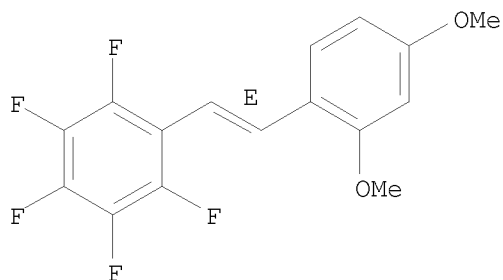
Double bond geometry as shown.



=> d hitstr 5-8

L3 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
 IT 649758-73-6P  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP  
 (Preparation)  
 (preparation of arylfluorophenylethenes as photochromic substances with  
 As-involved Wittig reaction as key step)  
 RN 649758-73-6 CAPLUS  
 CN Benzene, 1-[(1E)-2-(2,4-dimethoxyphenyl)ethenyl]-2,3,4,5,6-pentafluoro-  
 (CA INDEX NAME)

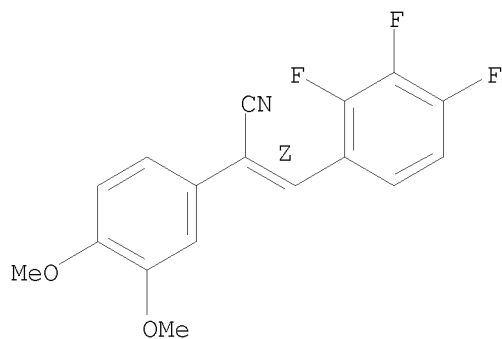
Double bond geometry as shown.



L3 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
 IT 741738-02-3P, (Z)-2-(3,4-Dimethoxyphenyl)-3-(2,3,4-trifluorophenyl)-acrylonitrile  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (diphenylacrylonitrile derivs. as breast cancer resistance protein  
 (BCRP) inhibitors)  
 RN 741738-02-3 CAPLUS  
 CN Benzeneacetonitrile, 3,4-dimethoxy- $\alpha$ -[(2,3,4-trifluorophenyl)methylene]-, ( $\alpha$ Z)- (CA INDEX NAME)

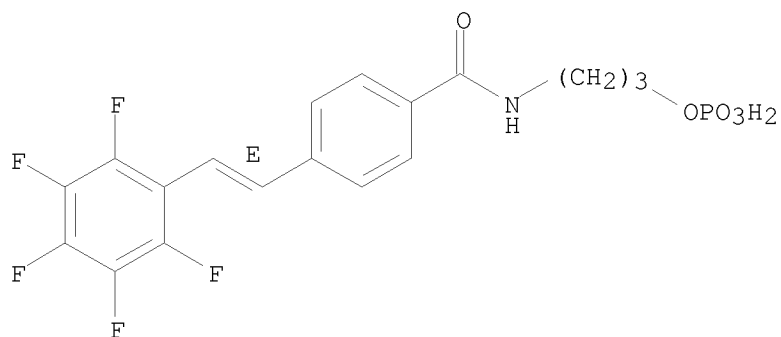
Double bond geometry as shown.





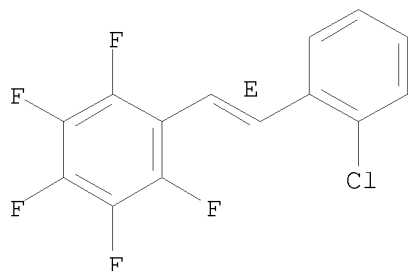
L3 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
 IT 691870-21-0D, 5'-DNA conjugate  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (5'-tethered stilbene derivs. act as fidelity- and affinity-enhancing  
 modulators of DNA duplex stability)  
 RN 691870-21-0 CAPLUS  
 CN Benzamide, 4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-N-[3-  
 (phosphonooxy)propyl]- (CA INDEX NAME)

Double bond geometry as shown.



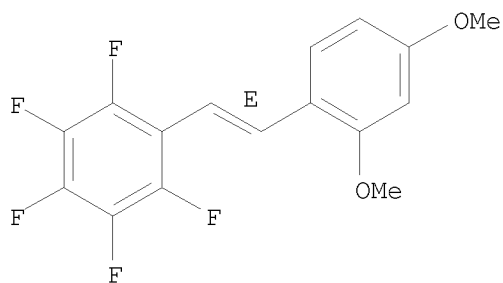
L3 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
 IT 109384-55-6P 649758-73-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (stereoselective preparation of pentafluorostilbenes by Rh acetate-catalyzed  
 condensation of pentafluorobenzaldehyde tosylhydrazone Na salt with  
 benzaldehydes via an arsonium ylide intermediate)  
 RN 109384-55-6 CAPLUS  
 CN Benzene, [(1E)-2-(2-chlorophenyl)ethenyl]pentafluoro- (9CI) (CA INDEX  
 NAME)

Double bond geometry as shown.



RN 649758-73-6 CAPLUS  
 CN Benzene, 1-[(1E)-2-(2,4-dimethoxyphenyl)ethenyl]-2,3,4,5,6-pentafluoro-  
 (CA INDEX NAME)

Double bond geometry as shown.



=> fil reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	49.76	69.31
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-8.50	-8.50

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FULL SEARCH INITIATED 15:53:52 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2266 TO ITERATE

100.0% PROCESSED 2266 ITERATIONS

186 ANSWERS

SEARCH TIME: 00.00.01

L4 186 SEA SSS FUL L1

=> fil hcapl l4

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=> fil hcapl

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SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

191.54

260.85

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

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FILE LAST UPDATED: 6 May 2010 (20100506/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

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L5      151 L4

=> s pettit/au
L6      0 PETTIT/AU

=> s pettit, g?/au
L7      1003 PETTIT, G?/AU

=> s 15 and 17
L8      0 L5 AND L7

=> d ibib abs 150-151 15
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L5  ANSWER 150 OF 151  HCAPLUS  COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:      1967:421520  HCAPLUS
DOCUMENT NUMBER:       67:21520
ORIGINAL REFERENCE NO.: 67:4055a,4058a
TITLE:                 Polyfluoroarenes. IX. Decafluorotolan: synthesis,
                        properties, and use as an organometallic ligand
AUTHOR(S):             Birchall, John M.; Bowden, F. L.; Haszeldine, Robert
                        N.; Lever, Alfred B. P.
CORPORATE SOURCE:      Univ. Manchester, Manchester, UK
SOURCE:                Journal of the Chemical Society [Section] A:
                        Inorganic, Physical, Theoretical (1967), (5), 747-53
                        CODEN: JCSIAP; ISSN: 0022-4944
DOCUMENT TYPE:         Journal
LANGUAGE:              English
AB  cf. CA 66: 37126j.  IC.tplbond.CI and C6F5MgBr give decafluorotolan
      (C6F5C.tplbond.CC6F5) in good yield.  The triple bond in the tolan
      undergoes ready catalytic hydrogenation, addition of Br, and oxidative
      cleavage, but is relatively unreactive towards hydration, iodination, and
      carbonylation.  Decafluorotolan reacts with methoxide ion in the 4- and
      4'-positions, and gives a good yield of
      tetrakis(pentafluorophenyl)thiophene when it is heated with S.  Reaction
      of the tolan with Co octacarbonyl yields a complex
      Co2(CO)6(C6F5C.tplbond.CC6F5), shown by its chemical and spectroscopic
      properties to be similar in structure to its hydrocarbon analog;
      octafluoro-4,4'-dimethoxytolan behaves similarly.
      Tetrakis(pentafluorophenyl)cyclopentadienone (perfluorotetracyclone) is
      obtained when a solution of the Co carbonyl complex of decafluorotolan is
      heated.  Reaction of decafluorotolan with Fe penta- or dodecacarbonyl
      yields a complex Fe2(CO)6(C6F5C.tplbond.CC6F5)2, together with
      perfluorotetracyclone.  21 references.
OS.CITING REF COUNT:   5      THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
                        (6 CITINGS)
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L5  ANSWER 151 OF 151  HCAPLUS  COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:      1966:67439  HCAPLUS
DOCUMENT NUMBER:       64:67439
ORIGINAL REFERENCE NO.: 64:12576a-c
TITLE:                 Aromatic polyfluoro compounds. XXVIII. Further
                        reactions of the pentafluorophenyl anion
AUTHOR(S):             Callander, D. D.; Coe, P. L.; Tatlow, J. C.
CORPORATE SOURCE:      Univ. Birmingham, UK
SOURCE:                Tetrahedron (1966), 22(2), 419-32
                        CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE:         Journal
LANGUAGE:              English
AB  cf. CA 64, 1987f.  The pentafluorophenyl anion from
      pentafluorophenyllithium was used as a nucleophile and as a source of
      tetrafluorobenzene.  As a nucleophile, it was used to make polyfluorobi-
```

and -terphenyl derivs. from perfluorotoluene, perfluoro-o-xylene, pentafluoronitrobenzene and bromopentafluorobenzene, and polyfluoropolyaryls from perfluorobiphenyl. It also attacked decafluorocyclohexene and chlorotrifluoroethylene, presumably by an addition-elimination sequence. Reactions using the tetrafluorobenzyne intermediate were carried out in the presence of excess bromopentafluorobenzene, pentafluorobenzene, and various lithium halides, in some cases with variation of the solvent. A mechanism for some of these reactions is postulated.

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

=> d hitstr ibib abs 140-149

L8 HAS NO ANSWERS

'HITSTR IBIB ABS ' IS NOT A VALID STRUCTURE FORMAT KEYWORD

Structure Formats

SIA ----- Structure Image, Attributes, and map table if it contains data. (Default)

SIM ----- Structure Image.

SAT ----- Structure ATtributes and map table if it contains data.

SCT ----- Structure Connection Table and map table if it contains data.

SDA ----- All Structure Data (image, attributes, connection table and map table if it contains data).

NOS ----- NO Structure data.

ENTER STRUCTURE FORMAT (SIA), SCT, SDA, SIM, SAT, NOS:end

=> d hitstr ibib abs 140-149 15

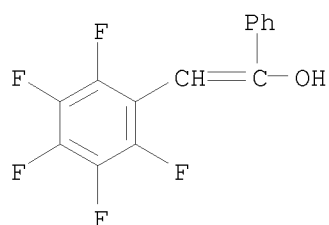
L5 ANSWER 140 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN

IT 33753-91-2 33753-92-3

RL: PRP (Properties)  
(nuclear magnetic resonance of)

RN 33753-91-2 HCAPLUS

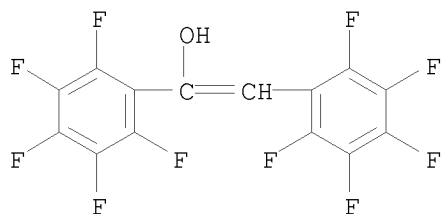
CN Benzenemethanol,  $\alpha$ -(2,3,4,5,6-pentafluorophenyl)methylene]-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 33753-92-3 HCAPLUS

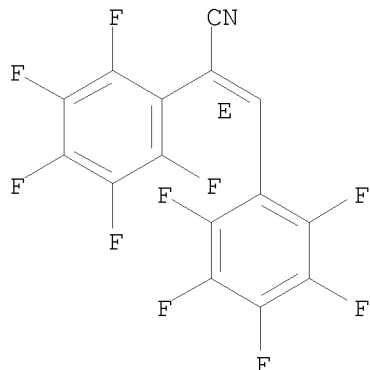
CN Benzenemethanol, 2,3,4,5,6-pentafluoro- $\alpha$ -(2,3,4,5,6-pentafluorophenyl)methylene]-, sodium salt (1:1) (CA INDEX NAME)



● Na

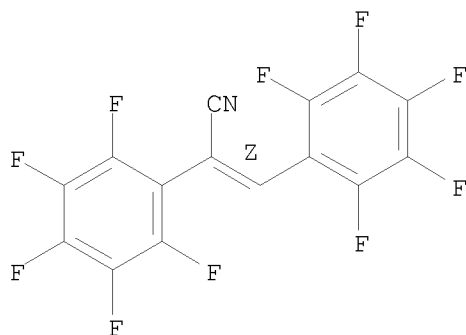
ACCESSION NUMBER: 1971:469273 HCAPLUS  
 DOCUMENT NUMBER: 75:69273  
 ORIGINAL REFERENCE NO.: 75:10951a,10954a  
 TITLE: Aromatic fluorinated derivatives. XLIII. Equilibrium acidity of pentafluorophenyl methanes  
 AUTHOR(S): Vlasov, V. M.; Krivousova, E. D.; Yakobson, G. G.  
 CORPORATE SOURCE: Novosib. Inst. Org. Khim., Novosibirsk, USSR  
 SOURCE: Zhurnal Organicheskoi Khimii (1971), 7(5), 986-9  
 CODEN: ZORKAE; ISSN: 0514-7492  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 AB The reaction of NaH with C<sub>6</sub>F<sub>5</sub>CH<sub>2</sub>COPh (I) in MeOCH<sub>2</sub>CH<sub>2</sub>OMe solution gives C<sub>6</sub>F<sub>5</sub>CH: CPhO-Na<sup>+</sup> (II). Similarly, C<sub>6</sub>F<sub>5</sub>CH: C(C<sub>6</sub>F<sub>5</sub>)O-Na<sup>+</sup> (III) is obtained. NMR spectra of p- and m- F atoms of II and III show more pos. chemical shifts than the spectra of I or C<sub>6</sub>F<sub>5</sub>CH<sub>2</sub>COC<sub>6</sub>F<sub>5</sub> (IV). PK values of I and IV are resp. 15.3 and 11.7. This pK shift, which is due to the replacement of Ph with C<sub>6</sub>F<sub>5</sub>, is considerably greater than expected because of the relatively small contribution of resonance towards the stabilization of II or III carbanions.  
 L5 ANSWER 141 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 25529-43-5P 25576-30-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 25529-43-5 HCAPLUS  
 CN Acrylonitrile, 2,3-bis(pentafluorophenyl)-, (E)- (8CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 25576-30-1 HCAPLUS  
 CN Acrylonitrile, 2,3-bis(pentafluorophenyl)-, (Z)- (8CI) (CA INDEX NAME)

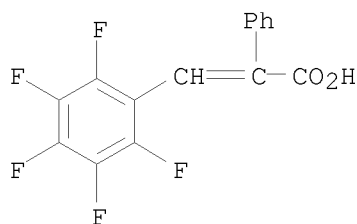
Double bond geometry as shown.



ACCESSION NUMBER: 1970:31402 HCAPLUS  
DOCUMENT NUMBER: 72:31402  
ORIGINAL REFERENCE NO.: 72:5717a, 5720a  
TITLE: Aromatic fluoro-derivatives. XXXVII. Reaction of pentafluorophenylacetonitrile with aldehydes in the presence of potassium fluoride  
AUTHOR(S): Vlasov, V. M.; Yakobson, G. G.  
CORPORATE SOURCE: Novosibirsk. Inst. Org. Khim., Novosibirsk, USSR  
SOURCE: Zhurnal Obshchei Khimii (1969), 39(9), 2071-5  
CODEN: ZOKHA4; ISSN: 0044-460X  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian

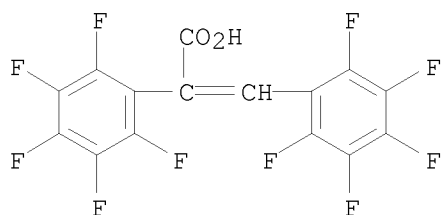
AB C6F5CH2CN (I) and paraformaldehyde kept 7 hr in (CH2OMe)2 in the presence of KF gave 42% C6F5CH(CN)CH2OH ("pentafluoroatroponitrile"), b0.2 110-12°, m. 41.5-2.5°, and 22% CH2[CH(CN)C6F5]2, m. 100-11°, both characterized by NMR and ir spectra. Similar reaction but with C6F5CHO in the presence of KF converted I into 17% cis-decafluorocyanostilbene, m. 103-5°, its mixture with the trans isomer (2%), m. 85-95°; and 8% 1,2-bis(pentafluorophenyl)-2-cyanoethanol, m. 146-8.5°; all were characterized by NMR spectra; the residue gave some C6F5CH2CONH2, m. 178-81.5°. Thus KF catalyzes condensations of I with aldehydes.

L5 ANSWER 142 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
IT 1081539-52-7P  
RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)  
(Transformations of decafluoro- $\alpha$ -phenylcinnamic acid)  
RN 1081539-52-7 HCAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[(2,3,4,5,6-pentafluorophenyl)methylene]- (CA INDEX NAME)



IT 24043-87-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reactions of)

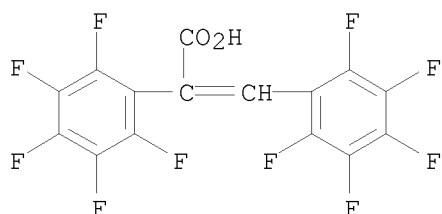
RN 24043-87-6 HCAPLUS  
CN Benzeneacetic acid, 2,3,4,5,6-pentafluoro- $\alpha$ -[(2,3,4,5,6-pentafluorophenyl)methylene]- (CA INDEX NAME)



IT 25955-31-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 25955-31-1 HCAPLUS  
CN Benzeneacetic acid, 2,3,4,5,6-pentafluoro- $\alpha$ -[(2,3,4,5,6-pentafluorophenyl)methylene]-, compd. with phenylmethyl carbamimidothioate (1:1) (CA INDEX NAME)

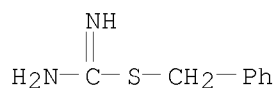
CM 1

CRN 24043-87-6  
CMF C15 H2 F10 O2



CM 2

CRN 621-85-2  
CMF C8 H10 N2 S



ACCESSION NUMBER: 1969:524121 HCAPLUS  
DOCUMENT NUMBER: 71:124121  
ORIGINAL REFERENCE NO.: 71:23055a,23058a  
TITLE: Transformations of decafluoro- $\alpha$ -phenylcinnamic acid  
AUTHOR(S): Molosnova, V. P.; Barkhash, V. A.; Vorozhtsov, N. N., Jr.  
CORPORATE SOURCE: Novosibirsk. Inst. Org. Khim., Novosibirsk, USSR  
SOURCE: Zhurnal Obshchei Khimii (1969), 39(8), 1774-7  
CODEN: ZOKHA4; ISSN: 0044-460X  
DOCUMENT TYPE: Journal



LANGUAGE: Russian

AB RMgCl from 20.8 g. C<sub>6</sub>F<sub>5</sub>Cl, prepared in N atmospheric was treated with dry CH<sub>2</sub>O over

30-40 min., then treated with ice-HCl to yield 73% C<sub>6</sub>F<sub>5</sub>CH<sub>2</sub>OH, b<sub>57</sub> 113-14.5°, m. 30-1°. C<sub>6</sub>F<sub>5</sub>CHO heated in Ac<sub>2</sub>O-Et<sub>3</sub>N with C<sub>6</sub>F<sub>5</sub>CH<sub>2</sub>CO<sub>2</sub>H (prepared from above carbinol via treatment with PCl<sub>5</sub>, KCN and H<sub>2</sub>O), 0.5 hr. gave after acidification a mixture of 63.6% C<sub>6</sub>F<sub>5</sub>CH:CPhCO<sub>2</sub>H (I), m. 187-8°, and 2% 3-pentafluorophenyl-5,6,7,8-tetrafluorocoumarin, m. 210-11°. I gave the S-benzylthiuronium salt, m. 167-7.5°. I heated with KF in Me<sub>2</sub>NCHO 5 hrs. gave 3-pentafluorobenzylidene-4,5,6,7-tetrafluoro-2-coumarone, m. 185-7°, which with KMnO<sub>4</sub> was oxidized to tetrafluorosalicyclic acid, m. 169-70°. I and 20% oleum in CHCl<sub>3</sub> at 40°, treated with NaN<sub>3</sub>, then quenched in ice, gave 73.5% decafluorodeoxybenzoin, m. 81-2°. Ir spectra were reported.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L5 ANSWER 143 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN

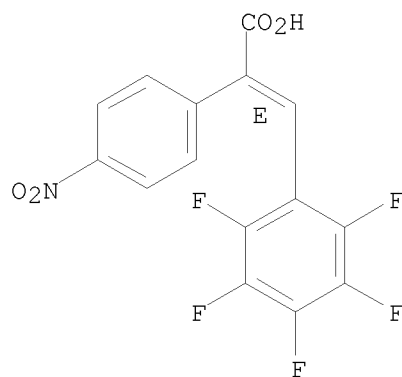
IT 1195657-61-4P

RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)  
(Polyfluoro heterocyclic compounds. II. Heterocyclic compounds from  
α-benzamido-β-(pentafluorophenyl)acrylic acid)

RN 1195657-61-4 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

Double bond geometry as shown.



ACCESSION NUMBER: 1969:413104 HCAPLUS

DOCUMENT NUMBER: 71:13104

ORIGINAL REFERENCE NO.: 71:2407a

TITLE: Polyfluoro heterocyclic compounds. II. Heterocyclic compounds from  
α-benzamido-β-(pentafluorophenyl)acrylic acid

AUTHOR(S): Petrova, T. D.; Mamaev, V. P.; Yakobson, G. G.;  
Vorozhtsov, N. N., Jr.

CORPORATE SOURCE: Novosibirsk. Inst. Org. Khim., Novosibirsk, USSR  
SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1968), (5),  
771-6

CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

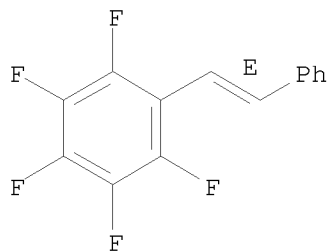
AB 2-Phenyl-4-pentafluorobenzal-5-oxazolone (I, Ar = Ph), m. 171-2°, was obtained by a known method (G. V. Shishkin; V. P. Mamaev, 1965). Similarly C<sub>6</sub>F<sub>5</sub>CHO, p-NO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>-CONHCH<sub>2</sub>CO<sub>2</sub>H, and AcONa gave 33%

2-p-nitrophenyl-4-pentafluorobenzal-5-oxazolone (II) m. 153-5° (C<sub>6</sub>H<sub>12</sub>-Me<sub>2</sub>CO). I gave  $\alpha$ -benzamido- $\beta$ -pentafluorophenylacrylic acid (Ia), m. 231-2°.  $\alpha$ -(p-Nitrophenyl)- $\beta$ -pentafluorophenylacrylic acid (IIb) m. 217-19°, was obtained from II in 90% yield. Ia with CH<sub>2</sub>N<sub>2</sub> gave 93% Me ester (Ib), m. 137.5-8.5° (MeOH-H<sub>2</sub>O) IIa with CH<sub>2</sub>N<sub>2</sub> gave 83% Me ester (IIb), m. 184-6° (MeOH-H<sub>2</sub>O). IIb can be obtained in 58% yield by crystallization of IIa from MeOH. Ia (0.18 g.) and 0.04 g. dry KF in 5 ml. dry Me<sub>2</sub>NCHO heated 5 hrs. at 100°, cooled, and diluted with H<sub>2</sub>O gave 0.1 g. 3-benzamido-5,6,7,8-tetrafluorocoumarin, m. 229-31° (C<sub>6</sub>H<sub>6</sub>). Similarly Ib gave 88% 2-phenyl-4-carbomethoxy-6,7,8,9-tetrafluorobenz[f]-1,3-oxazepine (Ic), m. 119-20.5° (MeOH). IIb similarly gave 73% 2-(p-nitrophenyl)-4-carbomethoxy-6,7,8,9-tetrafluorobenz[f]-1,3-oxazepine, m. 168-9° (CHCl<sub>3</sub>). Ic (1 g.) warmed with 25 ml. 5% KOH at 60° 16 hrs., unreacted Ic filtered off (0.04 g.), acidified with HCl, gave 0.84 g.  $\alpha$ -benzamido- $\beta$ -(2-hydroxy-3,4,5,6-tetrafluorophenyl)acrylic acid (Id), m. 189° (MeOH-H<sub>2</sub>O), which with CH<sub>2</sub>N<sub>2</sub> gave 97% Me ester, m. 160-1.5°. Ic (0.15 g.) refluxed in 3 ml. Me<sub>2</sub>CO with 1 ml. H<sub>2</sub>O and 3 drops concentrated HCl 2 hrs. and after cooling, diluted with 10 ml. H<sub>2</sub>O, gave 0.12 g. Me  $\alpha$ -benzamido- $\beta$ -(2-hydroxy-3,4,5,6-tetrafluorophenyl)acrylate, m. 169.5-71.5° (benzene). Indole and NaH were stirred in MeOCH<sub>2</sub>CH<sub>2</sub>OMe 1 hr., p-nitrobenzoyl chloride in MeOCH<sub>2</sub>CH<sub>2</sub>OMe added, the whole refluxed 30 min., and 20 ml. H<sub>2</sub>O added to yield after cooling 79% N-(p-nitrobenzoyl)indole, m. 156-7.5°.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L5 ANSWER 144 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 19292-25-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 19292-25-2 HCAPLUS  
 CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1969:403064 HCAPLUS  
 DOCUMENT NUMBER: 71:3064  
 ORIGINAL REFERENCE NO.: 71:556h,557a  
 TITLE: Transannular interactions in tetrafluoro[2.2]paracyclophane  
 AUTHOR(S): Filler, Robert; Choe, E. W.  
 CORPORATE SOURCE: Illinois Inst. of Technol., Chicago, IL, USA  
 SOURCE: Journal of the American Chemical Society (1969), 91(7), 1862-4  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.

AB The Wittig reaction of BzH and C<sub>6</sub>F<sub>5</sub>CH:PPh<sub>3</sub>, prepared by treating C<sub>6</sub>F<sub>5</sub>CH<sub>2</sub>PPh<sub>3</sub>Br with BuLi, gave trans-C<sub>6</sub>F<sub>5</sub>CH:CHPh which was hydrogenated to C<sub>6</sub>F<sub>5</sub>CH<sub>2</sub>CH<sub>2</sub>Ph. H was introduced into the fluorinated ring and the product was converted to 4-formyl-2,3,5,6-tetrafluorobibenzyl (I) by treatment with BuLi, followed by N-methylformanilide. Reduction of I with LiAlH<sub>4</sub> gave the alc., which was treated with PBr<sub>3</sub>. The bromide obtained was bromomethylated to give 4,4'-bis(bromomethyl)-2,3,5,6-tetrafluorobibenzyl, which was subjected to a Wurtz reaction to give 4,5,7,8-tetrafluoro[2.2]paracyclophane (II). The uv spectra of [2.2]paracyclophane, II, and octafluoro[2.2]paracyclophane were tabulated and discussed. The <sup>1</sup>H N.M.R. spectrum of II in CCl<sub>4</sub> revealed transannular coupling between the aromatic protons of 1 ring and the F atoms of the other.

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L5 ANSWER 145 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN

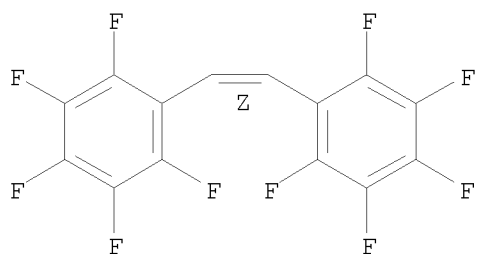
IT 14992-38-2P 14992-40-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 14992-38-2 HCAPLUS

CN Benzene, 1,1'-(1Z)-1,2-ethenediylbis[2,3,4,5,6-pentafluoro- (9CI) (CA INDEX NAME)

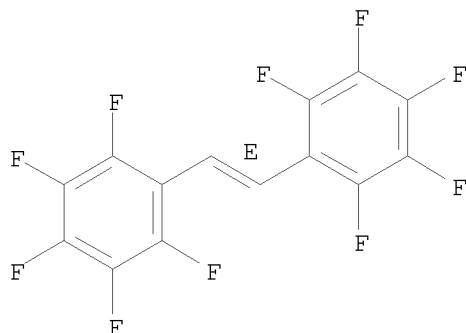
Double bond geometry as shown.



RN 14992-40-6 HCAPLUS

CN Benzene, 1,1'-(1E)-1,2-ethenediylbis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1969:106077 HCAPLUS

DOCUMENT NUMBER: 70:106077

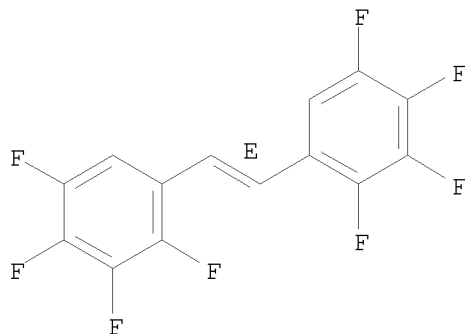
ORIGINAL REFERENCE NO.: 70:19783a,19786a

TITLE: Synthesis of cis- and trans-decafluorostilbenes

AUTHOR(S): Molosnova, V. P.; Vysochin, V. I.; Barkhash, V. A.;

Vorozhtsov, N. N., Jr.  
 CORPORATE SOURCE: Novosibirsk. Inst. Org. Khim., Novosibirsk, USSR  
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya  
 (1969), (1), 146-7  
 CODEN: IASKA6; ISSN: 0002-3353  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 AB Heating 2.15 g. C<sub>6</sub>F<sub>5</sub>CH:C(C<sub>6</sub>F<sub>5</sub>)CO<sub>2</sub>Ag with 0.05 g. Cu chromite catalyst and 6.4 ml. dry Me<sub>2</sub>NCHO 4 hrs. at 160-5° gave after an aqueous treatment 49% mixed isomers of C<sub>6</sub>F<sub>5</sub>CH:CHC<sub>6</sub>F<sub>5</sub> m. 50-60°, which after repeated crystallization from EtOH-petroleum ether gave the isomer m. 61-2°, which has the cis form. The more soluble isomer, m. 54-5°, also has the cis form on the basis of its spectra (uv and N.M.R.). On standing, both isomers lose the sharpness of m.p. and become approx. the same (m. 53-61°) after several months. However, no interconversion takes place during melting. C<sub>6</sub>F<sub>5</sub>CH<sub>2</sub>Br and Ph<sub>3</sub>P in C<sub>6</sub>H<sub>6</sub> gave the quaternary salt, m. 237-9°, which with MeONa in tetrahydrofuran 2 days at room temperature under N, then treated with C<sub>6</sub>F<sub>5</sub>CHO 1 day at room temperature and 6 hrs. at reflux, gave Ph<sub>3</sub>PO and 32% trans-C<sub>6</sub>F<sub>5</sub>CH:CHC<sub>6</sub>F<sub>5</sub>, m. 101.5-3.5°.  
 L5 ANSWER 146 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 21651-69-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 21651-69-4 HCAPLUS  
 CN Benzene, 1,1'-(1,2-ethenediyl)bis[2,3,4,5-tetrafluoro-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

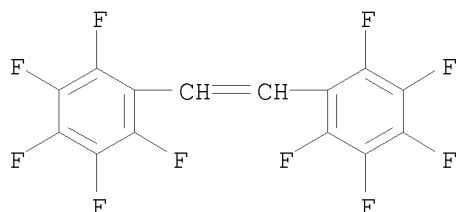


ACCESSION NUMBER: 1969:67706 HCAPLUS  
 DOCUMENT NUMBER: 70:67706  
 ORIGINAL REFERENCE NO.: 70:12629a,12632a  
 TITLE: Diels-Alder reactions of polyfluorocyclohexa-1,3-dienes. I. Addition of alkynes to perfluorocyclohexa-1,3-diene. Route to ortho-disubstituted tetrafluorobenzenes  
 AUTHOR(S): Anderson, Leonard Philip; Feast, William J.; Musgrave, William K. R.  
 CORPORATE SOURCE: Univ. Sci. Lab., Durham City, UK  
 SOURCE: Journal of the Chemical Society [Section] C: Organic (1969), (2), 211-17  
 CODEN: JSOOAX; ISSN: 0022-4952  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Perfluorocyclohexa-1,3-diene reacts with alkynes XC.tplbond.CY by 1,4-addition to give, exclusively and in good yield,

2-(X-substituted)-3-(Y-substituted)-1,4,5,6,7,7,8,8-octafluorobicyclo[2.2.2]octa-2,5-dienes (X = Y = CF<sub>3</sub>, Me, CH<sub>2</sub>Cl, CO<sub>2</sub>Et; X = H, Y = CF<sub>3</sub>, Me, CH<sub>2</sub>Cl, Ph; X = CF<sub>3</sub>, Y = Me) which eliminate tetrafluoroethylene on pyrolysis to give ortho-disubstituted tetrafluorobenzenes, or their further pyrolysis products 1-(X-substituted)-2-(Y-substituted)-3,4,5,6-tetrafluorobenzene (X = Y = CF<sub>3</sub>, Me, H; X = H, Y = CF<sub>3</sub>, Me, CH<sub>2</sub>Cl, CO<sub>2</sub>H, C.tplbond.CH, CH:CHC<sub>6</sub>H<sub>4</sub>, Ph; X = CF<sub>3</sub>, Y = Me).

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L5 ANSWER 147 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 19339-50-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 19339-50-5 HCAPLUS  
 CN Benzene, 1,1'-(1,2-ethenediyl)bis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)]



ACCESSION NUMBER: 1968:443571 HCAPLUS  
 DOCUMENT NUMBER: 69:43571  
 ORIGINAL REFERENCE NO.: 69:8147a,8150a  
 TITLE: Thermolysis of aromatic aldazines. IV. Similarities and differences with electron-impact fragmentation  
 AUTHOR(S): Buu-Hoi, N. P.; Saaïnt-Ruf, Germain  
 CORPORATE SOURCE: Inst. Chim. Subst. Natur., C.N.R.S., Gif-Sur-Yvette, Fr.  
 SOURCE: Bulletin de la Societe Chimique de France (1968), (2), 661-4  
 CODEN: BSCFAS; ISSN: 0037-8968  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 GI For diagram(s), see printed CA Issue.  
 AB The thermal decomposition of aromatic aldazines was examined by mass spectrometry. Thus, 5.4 g. C<sub>6</sub>D<sub>5</sub>CHO was refluxed 3 hrs. with 1.2 g. 98% N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O and 28 ml. EtOH to give I, m. 93°. I (5 g.) was heated at 200° till gases ceased to evolve, cooled, and distilled in vacuo to give C<sub>6</sub>D<sub>5</sub>CN (II) b. 233°, III, m. 125°, and IV, m. 275°. II, on KOH saponification gave C<sub>6</sub>D<sub>5</sub>CO<sub>2</sub>H, m. 122°. C<sub>6</sub>F<sub>5</sub>CHO (5.9 g.) was refluxed 2 hrs. with 0.75 g. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in 50 ml. EtOH to give 95% pentafluorobenzaldazine (V), m. 138°. V was heated 1 hr. at 280° in paraffin oil to give C<sub>6</sub>F<sub>5</sub>CH:CHC<sub>6</sub>F<sub>5</sub> (VI), m. 101°; resolidified and remelted 158° (hexane). VI was also prepared in 50% yield by direct heating of V. The m/e, and % abundance of the fragments produced during the thermolysis of aldazines were determined. The fragmentation patterns were compared with those obtained by electronic impact techniques. A bond cleavage between the aryl group and the rest of the aldazine mol. was observed during thermolysis.

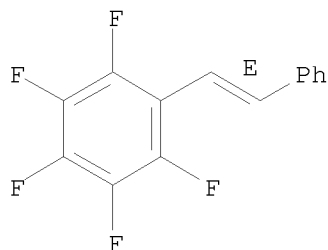
L5 ANSWER 148 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 19292-25-2P 19292-26-3P 19573-98-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 19292-25-2 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

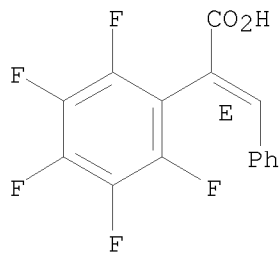
Double bond geometry as shown.



RN 19292-26-3 HCAPLUS

CN Acrylic acid, 2-(pentafluorophenyl)-3-phenyl-, (E)- (8CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 19573-98-9 HCAPLUS

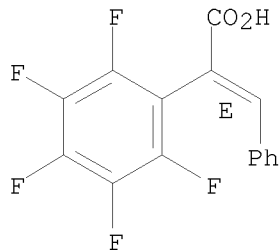
CN Acrylic acid, 2-(pentafluorophenyl)-3-phenyl-, compd. with  
2-benzyl-2-thiopseudourea (1:1), (E)- (8CI) (CA INDEX NAME)

CM 1

CRN 19292-26-3

CMF C15 H7 F5 O2

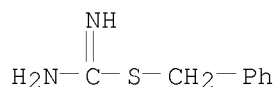
Double bond geometry as shown.



CM 2

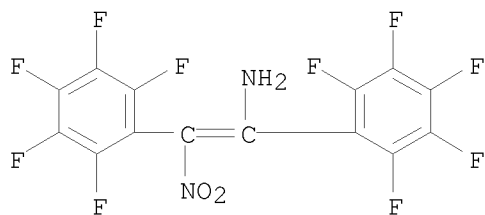
CRN 621-85-2

CMF C8 H10 N2 S



ACCESSION NUMBER: 1968:426929 HCAPLUS  
 DOCUMENT NUMBER: 69:26929  
 ORIGINAL REFERENCE NO.: 69:4995a,4998a  
 TITLE: Aromatic polyfluoro compounds. XLI. Some reaction of pentafluorobenzaldehyde  
 AUTHOR(S): Aroskar, E. V.; Brown, P. J. N.; Plevey, R. G.; Stephens, R.  
 CORPORATE SOURCE: Univ. Birmingham, Birmingham, UK  
 SOURCE: Journal of the Chemical Society [Section] C: Organic (1968), (13), 1569-75  
 CODEN: JSOOAX; ISSN: 0022-4952  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Pentafluorobenzaldehyde was converted into a range of derivs. by reactions involving the carbonyl group, viz., a pentafluorostilbene, a pentafluorocinnamic acid (I), an azine, an oxime, and a range of acetals. Other derivs., e.g. II, were made by reactions involving replacement of F using Me<sub>2</sub>NH, NaHS, PhSNa, and NaOMe.  
 OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L5 ANSWER 149 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 1081539-80-1P  
 RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)  
 (Reaction of pentafluorobenzonitrile with hydroxylamine)  
 RN 1081539-80-1 HCAPLUS  
 CN Benzenemethanamine, 2,3,4,5,6-pentafluoro- $\alpha$ -[nitro(2,3,4,5,6-pentafluorophenyl)methylene]- (CA INDEX NAME)



ACCESSION NUMBER: 1967:500075 HCAPLUS  
 DOCUMENT NUMBER: 67:100075  
 ORIGINAL REFERENCE NO.: 67:18823a,18826a  
 TITLE: Reaction of pentafluorobenzonitrile with hydroxylamine  
 AUTHOR(S): Shchegoleva, G. S.; Barkhash, V. A.; Vorozhtsov, N. N., Jr.  
 CORPORATE SOURCE: Novosibirsk Inst. Organ. Khim., Novosibirsk, USSR  
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1967), (3), 708-9  
 CODEN: IASKA6; ISSN: 0002-3353  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI For diagram(s), see printed CA Issue.  
 AB cf. CA 64: 12586d. To 1 g. C<sub>6</sub>F<sub>5</sub>CN and 1.4 g. HONH<sub>2</sub>.HCl in EtOH at 0° was added slowly 0.8 g. Na<sub>2</sub>CO<sub>3</sub> in H<sub>2</sub>O, the mixture kept 6 hrs. at 0°, extracted with Et<sub>2</sub>O, and the evaporated extract treated with 24% HBr gave

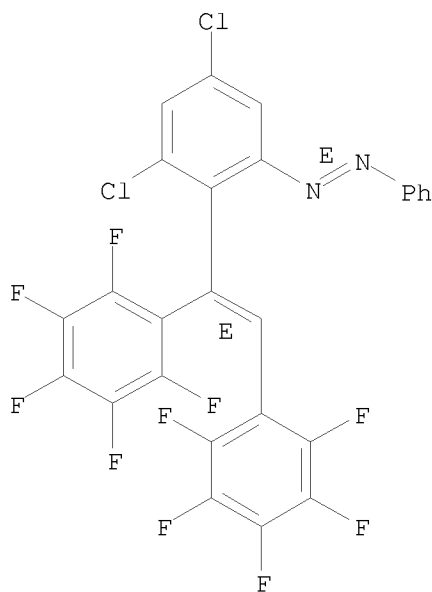
64% 2,3,4,5,6-pentafluorobenzamidoxime-HBr, m. 193-6°; free oxime (I) m. 94-7° (after sublimation). I (0.5 g.) and 1.5 g. C6F5COCl heated 0.5 hr. in C6H6 gave 80% C6F5C(NH2):NO2CC6F5 (II), m. 147-51°. BzCl similarly gave the benzoate, m. 160-5°. Refluxing II with POCl3 3 hrs. gave, after treatment with ice, 96% 3,5-bis(pentafluorophenyl)-1,2,4-oxadiazole (III), m. 100-1°. Similarly was prepared 3-pentafluorophenyl-5-phenyl-1,2,4-oxadiazole (IV), m. 88-93°. Ir spectra are reported, along with N.M.R. spectra, which confirmed the above structures.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

=> d hitstr ibib abs 90-99 15

L5 ANSWER 90 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 208998-17-8P 208998-19-0P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of dihydrocinnolines and stilbenylazobenzenes via cobalt  
 catalyzed addition of internal alkynes to 1,2-diaryldiazenes)  
 RN 208998-17-8 HCAPLUS  
 CN Diazene, 1-[2-[(1E)-1,2-bis(2,3,4,5,6-pentafluorophenyl)ethenyl]-3,5-  
 dichlorophenyl]-2-phenyl-, (1E)- (CA INDEX NAME)

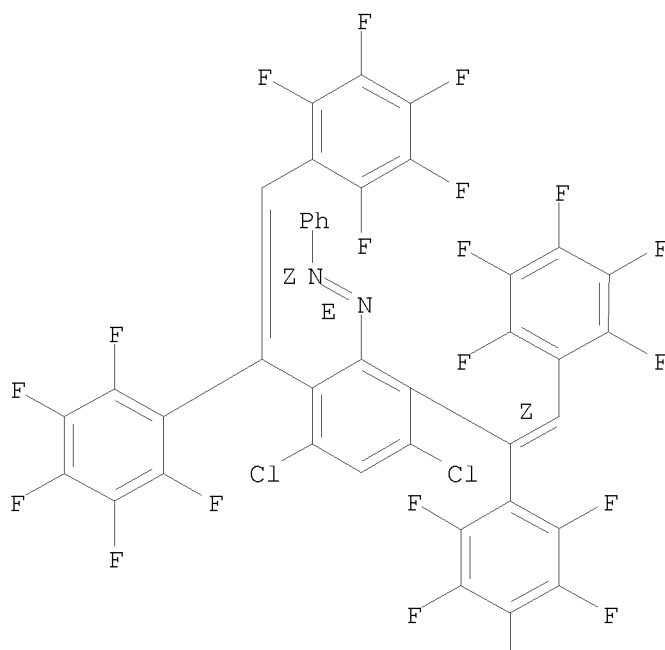
Double bond geometry as shown.



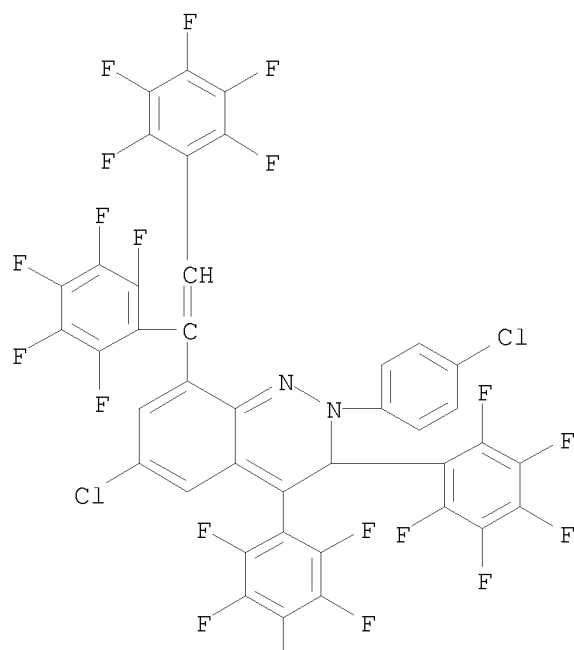
RN 208998-19-0 HCAPLUS  
 CN Diazene, 1-[2,6-bis[(1Z)-1,2-bis(2,3,4,5,6-pentafluorophenyl)ethenyl]-3,5-  
 dichlorophenyl]-2-phenyl-, (1E)- (CA INDEX NAME)

Double bond geometry as shown.



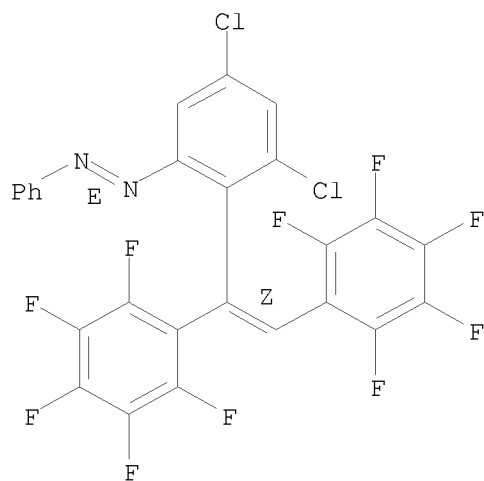


IT 208998-16-7P 208998-18-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of dihydrocinnolines and stilbenylazobenzenes via cobalt  
 catalyzed addition of internal alkynes to 1,2-diaryldiazenes)  
 RN 208998-16-7 HCAPLUS  
 CN Cinnoline, 8-[1,2-bis(2,3,4,5,6-pentafluorophenyl)ethenyl]-6-chloro-2-(4-  
 chlorophenyl)-2,3-dihydro-3,4-bis(2,3,4,5,6-pentafluorophenyl)- (CA INDEX  
 NAME)



RN 208998-18-9 HCAPLUS  
 CN Diazene, 1-[2-[(1Z)-1,2-bis(2,3,4,5,6-pentafluorophenyl)ethenyl]-3,5-dichlorophenyl]-2-phenyl-, (1E)- (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1998:295535 HCAPLUS  
 DOCUMENT NUMBER: 129:67752

ORIGINAL REFERENCE NO.: 129:14059a,14062a

TITLE: Transition metal complexes of diazenes. XLI. Cobalt catalyzed addition of internal alkynes to 1,2-diaryldiazenes: formation of 2,3-dihydrocinnolines, mono- and distilbenylazobenzenes

AUTHOR(S): Durr, U.; Heinemann, F. W.; Kisch, H.

CORPORATE SOURCE: Egerlandstr. 1, Institute for Inorganic Chemistry of the University Erlangen-Nurnberg, Erlangen, D-91058, Germany

SOURCE: Journal of Organometallic Chemistry (1998), 558(1-2), 91-101  
CODEN: JORCAI; ISSN: 0022-328X

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:67752

AB The CoH<sub>3</sub>(PPh<sub>3</sub>)<sub>3</sub> catalyzed addition reaction between azobenzenes and internal alkynes produces 2-stilbenylazobenzenes and isomeric 2,3-dihydrocinnolines which are intermediates in the rhodium catalyzed formation of N-anilinoindoles from the same substrates. The structures of six adducts were resolved by single crystal X-ray structural analyses. In both reactions the insertion of the alkyne into a M-H bond and ortho-metalation of the 1,2-diazene are key steps of the catalytic cycle. When only one Ph ring of the diazene is substituted like in 3,5-dichloro- and 3,5-difluoroazobenzene, this ring is selectively ortho-metalated in the case of cobalt while only the unsubstituted or both rings are attacked in rhodium catalysis. This difference enables a two-step regioselective cobalt catalyzed synthesis of the corresponding N-anilinoindole via isolation of 2-stilbenyl-3,5-difluoroazobenzene and subsequent acid catalyzed rearrangement to the indole derivative. Results obtained with 4-methoxytolan reveal that insertion into the Co-H bond produces regioisomers the ratio of which is determined by the sign of the triple bond polarization. It is postulated that insertion initially affords a cis-alkenyl ligand which undergoes an efficient cis-trans isomerization except when decafluorotolan is the alkyne; in this case also the cis-alkenyl product was isolated. Catalytic amts. of HOAc lead to a tenfold increase of reaction rate. No reaction is observed when sterically demanding substituents like mesityl and adamantyl are introduced to the triple bond.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

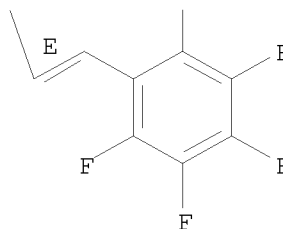
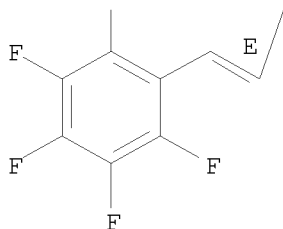
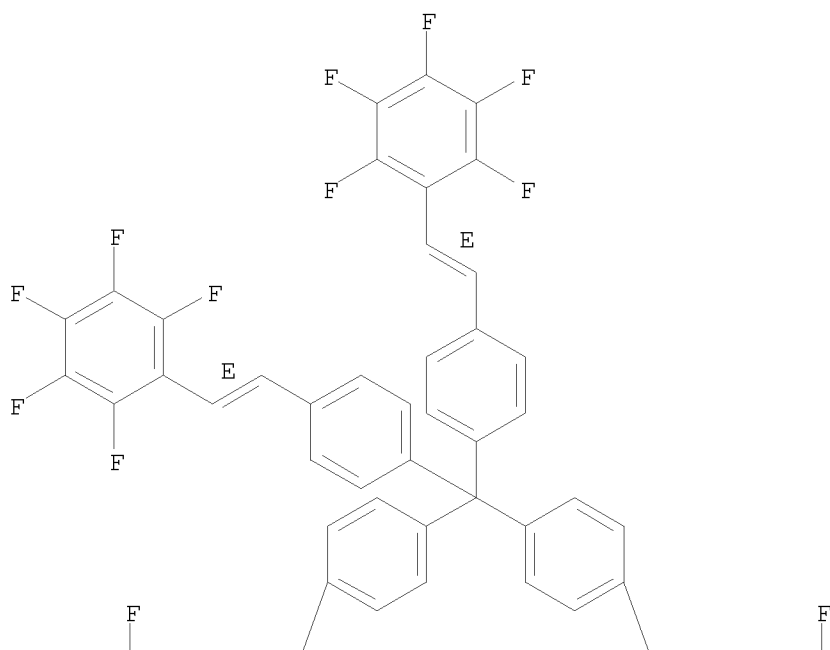
L5 ANSWER 91 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN

IT 205105-81-3P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation, spectroscopy, and morphol. of tetrastilbenoidmethanes)

RN 205105-81-3 HCAPLUS

CN Benzene, 1,1',1'',1'''-methanetetrayltetrakis[4-[2-(pentafluorophenyl)ethenyl]-, (all-E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1998:269159 HCAPLUS  
 DOCUMENT NUMBER: 128:257191  
 ORIGINAL REFERENCE NO.: 128:50915a,50918a  
 TITLE: Synthesis, Spectroscopy, and Morphology of  
 Tetrastilbenoidmethanes  
 AUTHOR(S): Oldham, Warren J., Jr.; Lachicotte, Rene J.; Bazan,  
 Guillermo C.  
 CORPORATE SOURCE: Department of Chemistry, University of Rochester,  
 Rochester, NE, 14627, USA  
 SOURCE: Journal of the American Chemical Society (1998),  
 120(12), 2987-2988  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 128:257191  
 AB Heck-coupling reaction of tetrakis(4-iodophenyl)methane (I) with styrene  
 or pentafluorostyrene gives tetrastilbenemethane (II) and  
 tetrakis(pentafluorostilbenyl)methane, resp. Yields in excess of 85% are  
 obtained using phase transfer conditions with a mixture of Pd(OAc)<sub>2</sub>, NBu<sub>4</sub>Br,  
 DMF and K<sub>2</sub>CO<sub>3</sub>. Similar reaction of I with 4,4'-tert-butylvinylstilbene

provides tetrakis(4-tert-butylstyrylstilbenyl)methane (III) in approx. 17% yield. The low yield is attributed to the low solubility of the intermediate coupled products. II and III show remarkable differences in solid-state properties. II is crystalline and an X-ray diffraction study is reported. In contrast, complex III is amorphous as determined by calorimetry studies. The ability of joining chromophores to a central tetrahedral core allows for the design of electrooptical materials of intermediate mol. weight with an amorphous morphol.

OS.CITING REF COUNT: 93 THERE ARE 93 CAPLUS RECORDS THAT CITE THIS RECORD (93 CITINGS)  
 REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 92 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN

IT 205597-37-1 205597-38-2 205597-39-3

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
 (1:1 cocrystal; crystal structure and photodimerization or photopolymn. of)

RN 205597-37-1 HCAPLUS

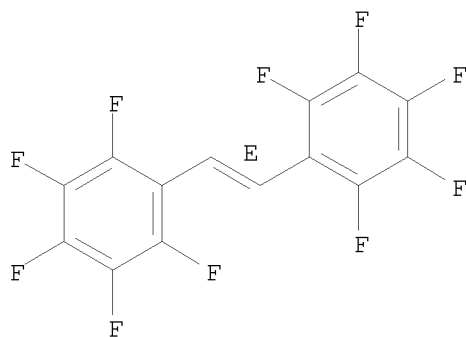
CN Benzene, 1,1'-(1,2-ethenediyl)bis[2,3,4,5,6-pentafluoro-, (E)-, compd. with (E)-1,1'-(1,2-ethenediyl)bis[benzene] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 14992-40-6

CMF C14 H2 F10

Double bond geometry as shown.

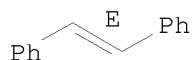


CM 2

CRN 103-30-0

CMF C14 H12

Double bond geometry as shown.



RN 205597-38-2 HCAPLUS

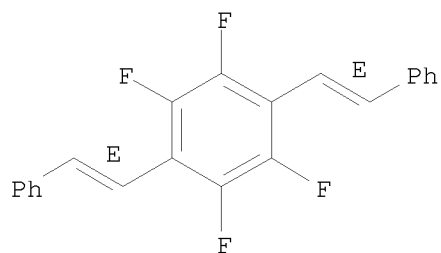
CN Benzene, 1,2,4,5-tetrafluoro-3,6-bis(2-phenylethenyl)-, stereoisomer, compd. with (E,E)-1,4-bis[2-(pentafluorophenyl)ethenyl]benzene (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 205597-35-9

CMF C22 H14 F4

Double bond geometry as shown.

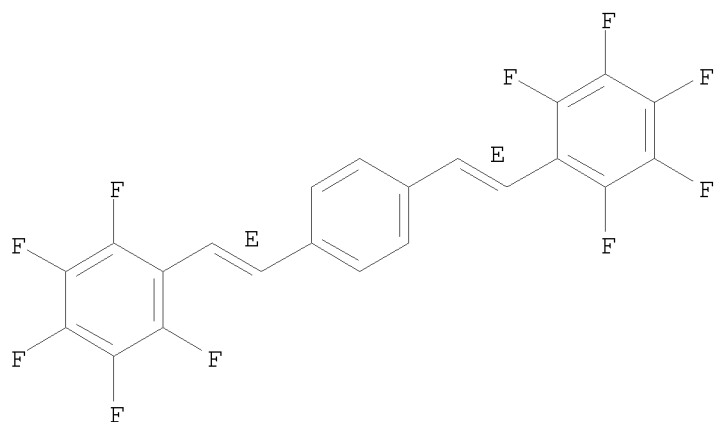


CM 2

CRN 128207-26-1

CMF C22 H8 F10

Double bond geometry as shown.



RN 205597-39-3 HCAPLUS

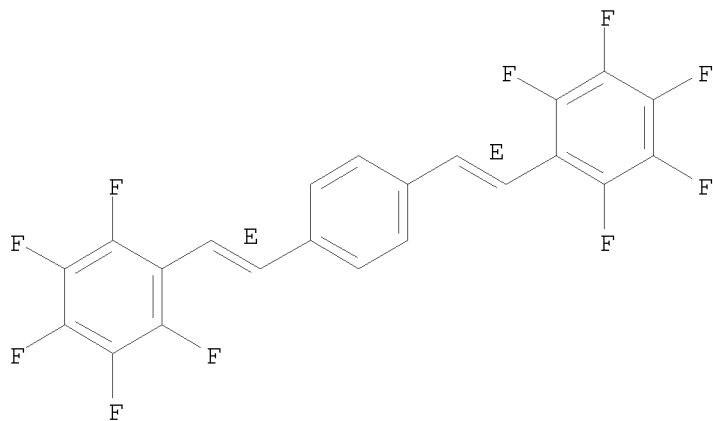
CN Benzene, 1,2-dimethyl-, compd. with  
(E,E)-1,4-bis[2-(pentafluorophenyl)ethenyl]benzene (1:1) (9CI) (CA INDEX  
NAME)

CM 1

CRN 128207-26-1

CMF C22 H8 F10

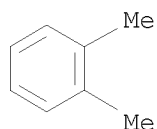
Double bond geometry as shown.



CM 2

CRN 95-47-6

CMF C8 H10



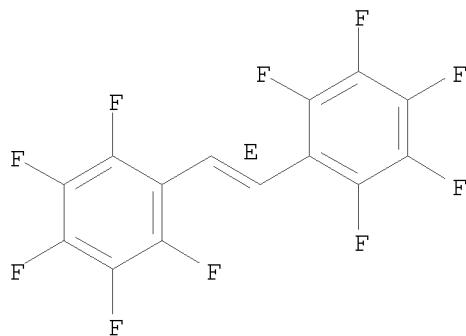
IT 14992-40-6

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(cocrystn. with trans-stilbene and photochem. dimerization of cocrystals)

RN 14992-40-6 HCAPLUS

CN Benzene, 1,1'-(1E)-1,2-ethenediylbis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)

Double bond geometry as shown.



IT 205597-40-6

RL: PRP (Properties)  
(proposed solid-state packing of)

RN 205597-40-6 HCAPLUS

CN Benzene, 1,2,4,5-tetrafluoro-3,6-bis(2-phenylethenyl)-, (E,E)-, polymer

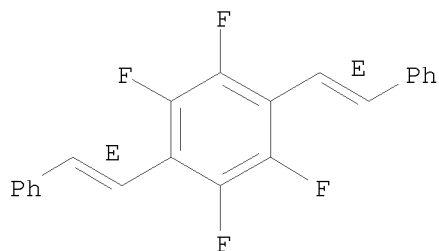
with (E,E)-1,4-bis[2-(pentafluorophenyl)ethenyl]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 205597-35-9

CMF C22 H14 F4

Double bond geometry as shown.

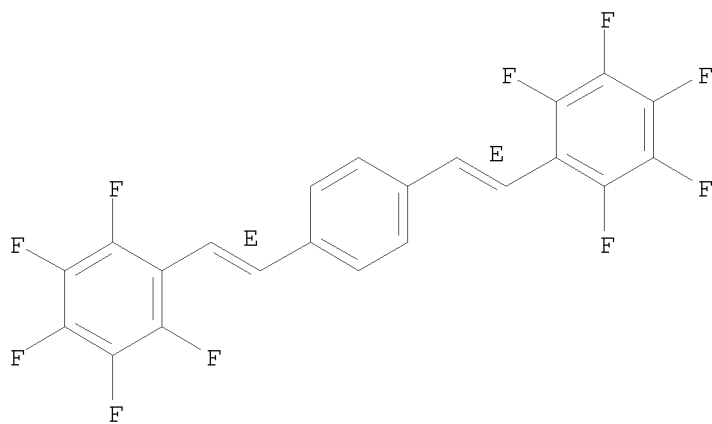


CM 2

CRN 128207-26-1

CMF C22 H8 F10

Double bond geometry as shown.



IT 128207-26-1P

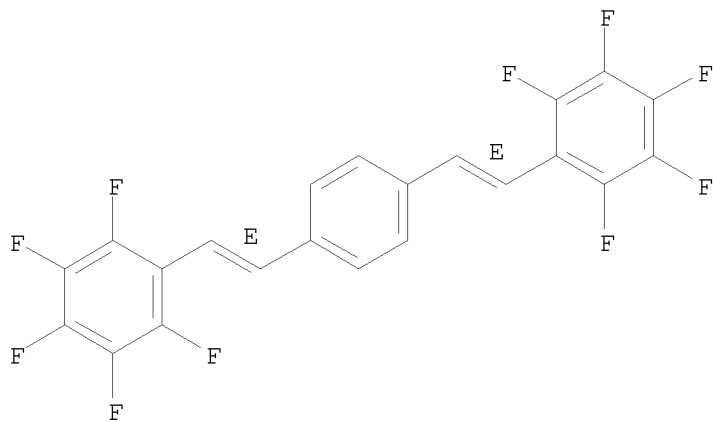
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(topochem. [2+2] photodimerization and photopolymn. of olefinic compds.  
in relation to phenyl-perfluorophenyl stacking interactions)

RN 128207-26-1 HCAPLUS

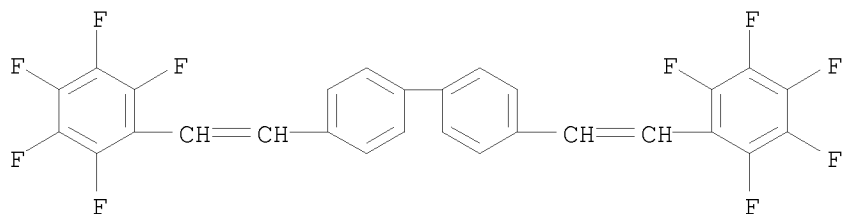
CN Benzene, 1,4-bis[(1E)-2-(pentafluorophenyl)ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.





ACCESSION NUMBER: 1998:256711 HCAPLUS  
 DOCUMENT NUMBER: 128:270928  
 ORIGINAL REFERENCE NO.: 128:53637a, 53640a  
 TITLE: Phenyl-perfluorophenyl stacking interactions: topochemical [2+2] photodimerization and photopolymerization of olefinic compounds  
 AUTHOR(S): Coates, Geoffrey W.; Dunn, Alex R.; Henling, Lawrence M.; Ziller, Joseph W.; Lobkovsky, Emil B.; Grubbs, Robert H.  
 CORPORATE SOURCE: Department of Chemistry Baker Laboratory, Cornell University, Ithaca, NY, 14853, USA  
 SOURCE: Journal of the American Chemical Society (1998), 120(15), 3641-3649  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The face-to-face stacking interaction between Ph and perfluorophenyl groups is emerging as a common noncovalent interaction. To explore the generality of this supramol. synthon, the solid-state packing structure and reactivity of several monoolefins and diolefins substituted with Ph and perfluorophenyl groups was investigated. Of the seven crystalline or cocryst. materials investigated, six were found to undergo a photochem. induced [2+2] reaction in the solid state. By determining the stereochem. of the photoproduct and/or X-ray structural anal. of the olefinic precursors, the stacked interaction between Ph and perfluorophenyl groups in the photoactive crystals were revealed.  
 OS.CITING REF COUNT: 257 THERE ARE 257 CAPLUS RECORDS THAT CITE THIS RECORD (258 CITINGS)  
 REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT  
  
 L5 ANSWER 93 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 205816-83-7P  
 RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses)  
 (Novel fluorinated  $\pi$ -conjugated oligomers as electron transport materials in organic light emitting diodes)  
 RN 205816-83-7 HCAPLUS  
 CN 1,1'-Biphenyl, 4,4'-bis[2-(2,3,4,5,6-pentafluorophenyl)ethenyl]- (CA INDEX NAME)



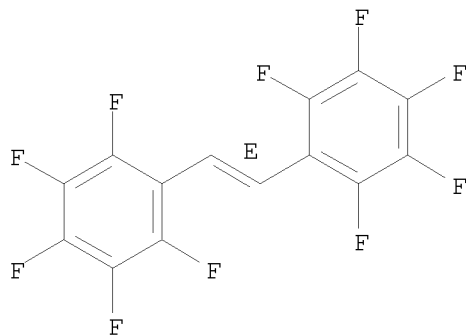
ACCESSION NUMBER: 1998:249215 HCAPLUS  
 DOCUMENT NUMBER: 128:287910  
 ORIGINAL REFERENCE NO.: 128:56881a,56884a  
 TITLE: Novel fluorinated  $\pi$ -conjugated oligomers as electron transport materials in organic light emitting diodes  
 AUTHOR(S): Winkler, Berthold; Meghdadi, Farideh; Tasch, Stefan; Mullner, Ruth; Resel, Roland; Saf, robert; Leising, Gunther; Stelzer, Franz  
 CORPORATE SOURCE: SFB Elektroaktive Stoffe, TU-Graz, Institut Chemische Technologie Organischer Stoffe, Graz, 8010, Austria  
 SOURCE: Optical Materials (Amsterdam) (1998), 9(1-4), 159-162  
 CODEN: OMATET; ISSN: 0925-3467  
 PUBLISHER: Elsevier Science B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB New partially fluorinated  $\pi$ -conjugated oligomers were synthesized by transition metal catalyzed coupling reactions. These electron deficient arenes were applied as electron transport materials in organic light emitting devices using the blue luminescing p-hexaphenyl as active material. The threshold voltage is affected by lower or higher values compared to the single layer device, while quantum efficiency increases with all prepared charge transport materials reaching values up to 3.4%. A multilayer device using a partially fluorinated trimer with poly(azomethine) as hole transport material showed a turn-on voltage of .apprx.3.4 V.

OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)  
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 94 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 14992-40-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 14992-40-6 HCAPLUS  
 CN Benzene, 1,1'-(1E)-1,2-ethenediylbis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)

Double bond geometry as shown.



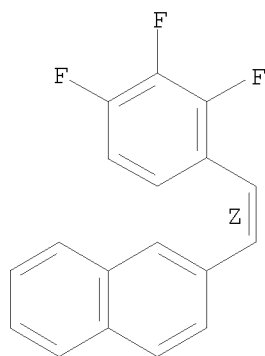
ACCESSION NUMBER: 1998:26288 HCAPLUS  
 DOCUMENT NUMBER: 128:61608  
 ORIGINAL REFERENCE NO.: 128:12071a,12074a  
 TITLE: Study of the Evolution of  $\eta^1$ - $\eta^2$ -Enylpalladium Complexes when the Palladium-Migration Process Is Blocked  
 AUTHOR(S): Albeniz, Ana C.; Espinet, Pablo; Lin, Yong-Shou  
 CORPORATE SOURCE: Departamento de Quimica Inorganica Facultad de Ciencias, Universidad de Valladolid, Valladolid, 47005, Spain  
 SOURCE: Organometallics (1997), 16(26), 5964-5973  
 CODEN: ORGND7; ISSN: 0276-7333  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB  $\eta^1$ - $\eta^2$ -Enylpalladium complexes were detected and/or isolated in the reaction of  $[\text{PdPfBr}(\text{NCMe})_2]$  ( $\text{Pf} = \text{C}_6\text{F}_5$ ) with the dienes  $\text{RCH}:\text{CH}(\text{CH}_2)_n\text{Y}(\text{CH}_2)_m\text{CH}:\text{CH}_2$  ( $\text{R} = \text{H}, \text{Me}$ ;  $n, m = 0, 1$ ;  $\text{Y} = \text{CCl}_2, \text{C}(\text{COOMe})_2, \text{CO}_2, \text{O}, \text{SiMe}_2, \text{SO}_2$ ). Insertion of one double bond into the Pd-aryl bond and coordination of the remaining double bond gives the above-mentioned organometallic derivs. The dienes tested have a nonhydrogen-containing link ( $\text{Y}$ ), so Pd migration to give  $\eta^3$ -allyl derivs. is blocked. The evolution and decomposition processes observed for the  $\eta^1$ : $\eta^2$ -enyls reveal that  $\beta$ -X elimination is the main operating pathway for  $\text{Y} = \text{CCl}_2$  ( $\text{X} = \text{Cl}$ ) or  $\text{Y} = \text{OCO}, \text{O}, \text{SiMe}_2$  ( $\text{X} = \text{YR}$ ). When  $\text{Y} = \text{C}(\text{COOMe})_2$  or  $\text{SO}_2$ , C-X cleavage is not observed and intramol. insertion to give cyclic products or Pd-H elimination to generate a substituted diene predominates, resp. A trend in C-X cleavage easiness in the presence of Pd can be estimated:  $\text{C-C} \ll \text{C-SO}_2 < \text{C-Cl} < \text{C-O (ether)} < \text{C-O (ester)} \approx \text{C-Si}$ .

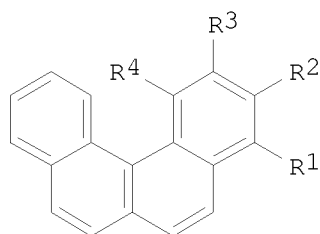
OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)  
 REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 95 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 199473-14-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and pyrolysis of benzophenanthrenes in preparation of benzofluoranthrenes)  
 RN 199473-14-8 HCAPLUS  
 CN Naphthalene, 2-[(1Z)-2-(2,3,4-trifluorophenyl)ethenyl]- (CA INDEX NAME)

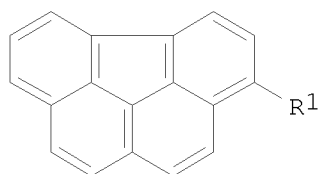
Double bond geometry as shown.



ACCESSION NUMBER: 1997:706427 HCAPLUS  
 DOCUMENT NUMBER: 128:34566  
 ORIGINAL REFERENCE NO.: 128:6809a,6812a  
 TITLE: Fullerene tectonics. Part 2. Synthesis and pyrolysis of halogenated benzo[c]phenanthrenes  
 AUTHOR(S): Plater, M. John  
 CORPORATE SOURCE: Department of Chemistry, Aberdeen University, Aberdeen, AB24 3UE, UK  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1997), (19), 2903-2909  
 CODEN: JCPRB4; ISSN: 0300-922X  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 128:34566  
 GI



I



II

AB Halogenated benzo[c]phenanthrenes with a halogen in the hindered fiord region I (R1, R2 = H, F, Cl, Br; R3 = H, F; R4 = Cl, F, H, iodo, OMe) are prepared by photochem. cyclization of appropriately substituted stilbenes. Pyrolysis of I gives the corresponding benzo[g]fluoranthrenes II (R1 = H, F, Cl) in moderate yields. At higher temps. a competing rearrangement pathway to cyclopenta[cd]pyrene occurs.

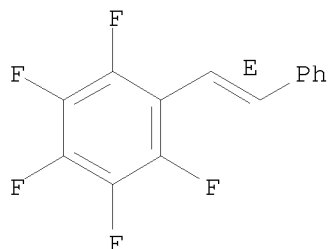
OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)  
 REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 96 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
 IT 19292-25-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (involvement of intramol. hydride transfer in formation of alkanes from palladium alkyls)

RN 19292-25-2 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

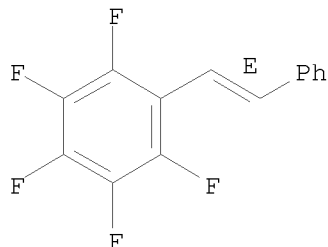
Double bond geometry as shown.



ACCESSION NUMBER: 1997:552742 HCAPLUS  
DOCUMENT NUMBER: 127:248216  
ORIGINAL REFERENCE NO.: 127:48505a,48508a  
TITLE: Involvement of Intramolecular Hydride Transfer in the Formation of Alkanes from Palladium Alkyls  
AUTHOR(S): Albeniz, Ana C.; Espinet, Pablo; Lin, Yong-Shou  
CORPORATE SOURCE: Departamento de Quimica Inorganica Facultad de Ciencias, Universidad de Valladolid, Valladolid, 47005, Spain  
SOURCE: Organometallics (1997), 16(19), 4030-4032  
CODEN: ORGND7; ISSN: 0276-7333  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Intramol. hydride transfer in a dimer between Pd atoms and reductive elimination of H and a benzyl moiety to give PhCH<sub>2</sub>CH<sub>2</sub>C<sub>6</sub>F<sub>5</sub> is the main decomposition pathway for the hydrido species generated from the η<sup>3</sup>-benzylpalladium derivative [Pd<sub>2</sub>(μ-Br)<sub>2</sub>(η<sup>3</sup>-CHPhCH<sub>2</sub>C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>] (1). The commonly accepted decomposition of the palladium hydride to give Pd(0) and HX, followed by acid attack on 1 to produce the alkane, is ruled out in this case.  
OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)  
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 97 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN  
IT 19292-25-2P  
RL: BYP (Byproduct); PREP (Preparation)  
(arylation of styrene by palladium acetate-phosphine complexes)  
RN 19292-25-2 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1997:185199 HCAPLUS  
 DOCUMENT NUMBER: 126:263882  
 ORIGINAL REFERENCE NO.: 126:51109a,51112a  
 TITLE: Arylation of styrene by palladium acetate-phosphine complexes  
 AUTHOR(S): Park, Young-ae Whang; Hwang, Seong Won  
 CORPORATE SOURCE: College Natural Science, Sang Myung University, Seoul, 110-743, S. Korea  
 SOURCE: Bulletin of the Korean Chemical Society (1997), 18(2), 218-221  
 CODEN: BKCSDE; ISSN: 0253-2964  
 PUBLISHER: Korean Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 126:263882

AB When phenylation of styrene was carried out in the presence of Pd(OAc)<sub>2</sub> and PPh<sub>3</sub> in benzene, trans-stilbene was obtained in good yield (566%) with high selectivity (98%) under mild conditions (55°C, 50 psi O<sub>2</sub>, 20 h). Since trans-stilbene could be produced not only from benzene but also from the Ph group of PPh<sub>3</sub> by migration of its Ph group to Pd, the competitiveness of benzene and the migratory aptitudes of aryl groups of triarylphosphines toward styrene has been investigated with various phosphines [PR<sub>3</sub> = P(p-C<sub>6</sub>H<sub>4</sub>CH<sub>3</sub>)<sub>3</sub>, P(p-C<sub>6</sub>H<sub>4</sub>OCH<sub>3</sub>)<sub>3</sub>, P(p-C<sub>6</sub>H<sub>4</sub>F)<sub>3</sub>, P(p-C<sub>6</sub>H<sub>4</sub>Cl)<sub>3</sub>, P(C<sub>6</sub>H<sub>5</sub>)<sub>3</sub>, P(C<sub>6</sub>H<sub>11</sub>)<sub>3</sub>, P(OBu)<sub>3</sub>, P(CH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>)<sub>3</sub>, and P(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>]. The yield and selectivity toward trans-stilbene are increased as the basicity of the phosphines increases. The composition of arylated olefin from arylphosphine, in turn, increases as the electronegativity of the substituent on the aryl group of arylphosphines increases.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

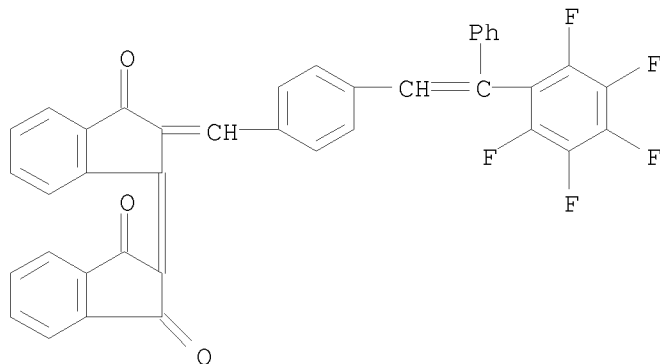
L5 ANSWER 98 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN

IT 184031-79-6

RL: DEV (Device component use); USES (Uses)  
 (electrophotog. photoreceptor containing cyclopentenedione derivative charge-transporting agent)

RN 184031-79-6 HCAPLUS

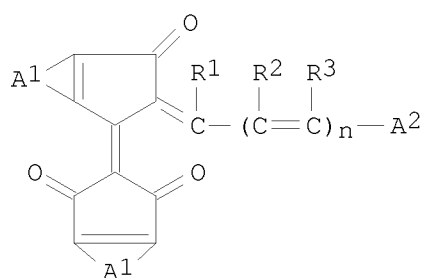
CN 1H-Indene-1,3(2H)-dione, 2-[2,3-dihydro-3-oxo-2-[[4-[2-(2,3,4,5,6-pentafluorophenyl)-2-phenylethenyl]phenyl]methylene]-1H-inden-1-ylidene]-  
 (CA INDEX NAME)



ACCESSION NUMBER: 1996:740003 HCAPLUS  
 DOCUMENT NUMBER: 126:39677  
 ORIGINAL REFERENCE NO.: 126:7761a

TITLE: Electrophotographic photoreceptor containing  
 cyclopentenedione derivatives  
 INVENTOR(S): Hashimoto, Mitsuru  
 PATENT ASSIGNEE(S): Matsushita Electric Ind Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08254845	A	19961001	JP 1995-56012	19950315
PRIORITY APPLN. INFO.: GI			JP 1995-56012	19950315



I

AB The photoreceptor comprises a support coated with a photosensitive layer  
 containing I [A1-2 = (substituted) aromatic ring or aromatic heterocycle; R1-3  
 = H,  
 alkyl, CN, aromatic ring or aromatic heterocycle; n = 0-2] . The photoreceptor  
 shows high sensitivity, good durability, and good pos. charging property.

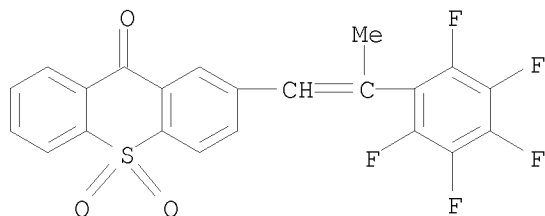
L5 ANSWER 99 OF 151 HCAPLUS COPYRIGHT 2010 ACS on STN

IT 181883-19-2 181883-45-4

RL: DEV (Device component use); USES (Uses)  
 (electrophotog. photoreceptor from)

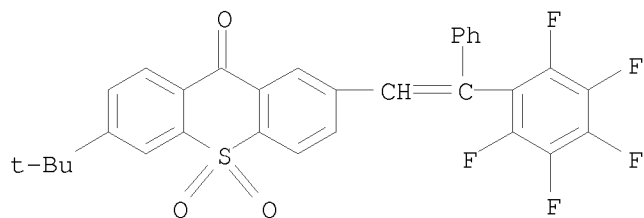
RN 181883-19-2 HCAPLUS

CN 9H-Thioxanthen-9-one, 2-[2-(2,3,4,5,6-pentafluorophenyl)-1-propen-1-yl]-,  
 10,10-dioxide (CA INDEX NAME)



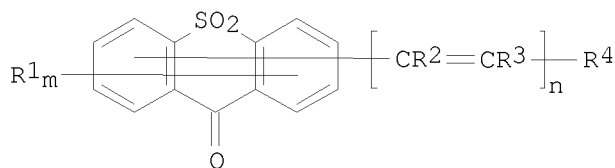
RN 181883-45-4 HCAPLUS

CN 9H-Thioxanthen-9-one, 6-(1,1-dimethylethyl)-2-[2-(2,3,4,5,6-  
 pentafluorophenyl)-2-phenylethenyl]-, 10,10-dioxide (CA INDEX NAME)



ACCESSION NUMBER: 1996:609663 HCAPLUS  
 DOCUMENT NUMBER: 125:234345  
 ORIGINAL REFERENCE NO.: 125:43555a, 43558a  
 TITLE: Electrophotographic photoreceptor  
 INVENTOR(S): Hashimoto, Mitsuru  
 PATENT ASSIGNEE(S): Matsushita Electric Ind Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 54 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08179528	A	19960712	JP 1994-322492	19941226
PRIORITY APPLN. INFO.: GI			JP 1994-322492	19941226



AB The electrophotog. photoreceptor comprises on its elec. conductive substrate a photosensitive layer containing I (R1 = amino, alkyl, cycloalkyl, hydroxy, acyl, carboxyl and its ester, aromatic hydrocarbon group, halo, CN, NO2; R2 and R3 = H, CN, carboxyl and its ester, aromatic hydrocarbon group, alkyl; R4 = aromatic hydrocarbon group, aromatic heterocyclic group; R3 and R4 may form a ring; m = 0-7; n = 1, 2).

=> s 15 not py>2003  
 8805773 PY>2003  
 L9 93 L5 NOT PY>2003

=> d ibib abs hitstr 1-10

L9 ANSWER 1 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2008:1383639 HCAPLUS  
 DOCUMENT NUMBER: 149:555128  
 TITLE: Synthetic applications of phosphoryl-stabilized anions  
 AUTHOR(S): Wadsworth, William S., Jr.  
 CORPORATE SOURCE: South Dakota State Univ., Brookings, SD, USA  
 SOURCE: Organic Reactions (Hoboken, NJ, United States) (1977),  
 25, No pp. given

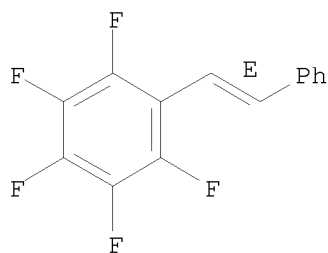


CODEN: ORHNBA

URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/107610747/HOME>

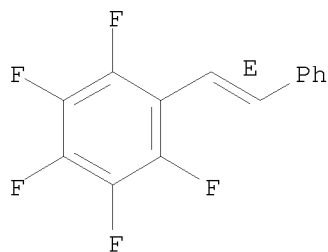
PUBLISHER: John Wiley & Sons, Inc.  
DOCUMENT TYPE: Journal; General Review; (online computer file)  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 149:555128  
AB A review of the article Synthetic applications of phosphoryl-stabilized anions.  
IT 19292-25-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(Synthetic Applications of Phosphoryl-Stabilized Anions)  
RN 19292-25-2 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



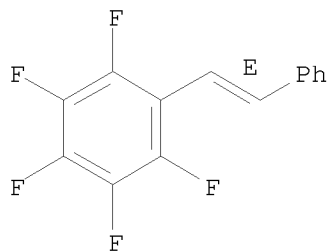
L9 ANSWER 2 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2008:994601 HCAPLUS  
DOCUMENT NUMBER: 149:307000  
TITLE: Dichloroborane-Dimethyl Sulfide  
AUTHOR(S): Zaidlewicz, Marek; Brown, Herbert C.; Ramachandran, P. Veeraraghavan; Chandra, U. Subash  
CORPORATE SOURCE: Pol.  
SOURCE: e-EROS Encyclopedia of Reagents for Organic Synthesis (2001), No pp. given. John Wiley & Sons, Ltd.: Chichester, UK.  
CODEN: 69KUHI  
URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/104554785/HOME>  
DOCUMENT TYPE: Conference; General Review; (online computer file)  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 149:307000  
AB A review of the article Dichloroborane-Dimethyl Sulfide.  
IT 19292-25-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Dichloroborane-Dimethyl Sulfide)  
RN 19292-25-2 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



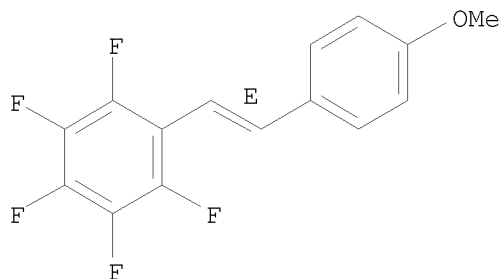
L9 ANSWER 3 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2008:994498 HCAPLUS  
 DOCUMENT NUMBER: 149:306901  
 TITLE: Dirhodium(II) Tetraacetate  
 AUTHOR(S): Doyle, Michael P.  
 CORPORATE SOURCE: USA  
 SOURCE: e-EROS Encyclopedia of Reagents for Organic Synthesis  
 (2001), No pp. given. John Wiley & Sons, Ltd.:  
 Chichester, UK.  
 CODEN: 69KUHI  
 URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/104554785/HOME>  
 DOCUMENT TYPE: Conference; General Review; (online computer file)  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 149:306901  
 AB A review of the article Dirhodium(II) Tetraacetate.  
 IT 19292-25-2P 78622-66-9P 109384-58-9P  
 649758-72-5P 649758-75-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (Dirhodium(II) Tetraacetate)  
 RN 19292-25-2 HCAPLUS  
 CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



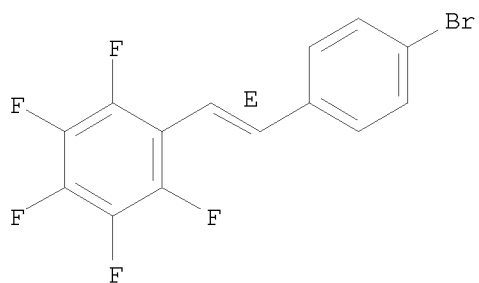
RN 78622-66-9 HCAPLUS  
 CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-(4-methoxyphenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



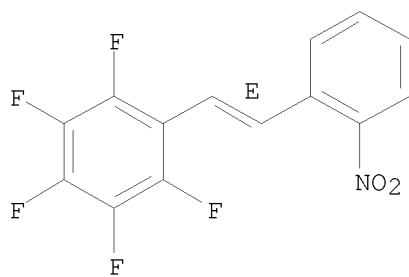
RN 109384-58-9 HCAPLUS  
 CN Benzene, 1-[(1E)-2-(4-bromophenyl)ethenyl]-2,3,4,5,6-pentafluoro- (CA INDEX NAME)

Double bond geometry as shown.



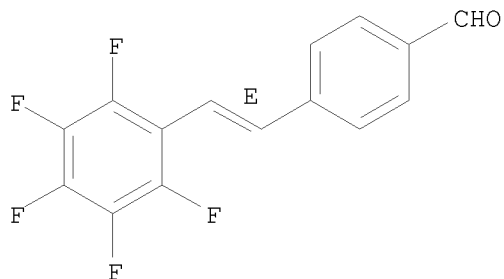
RN 649758-72-5 HCAPLUS  
 CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-(2-nitrophenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.

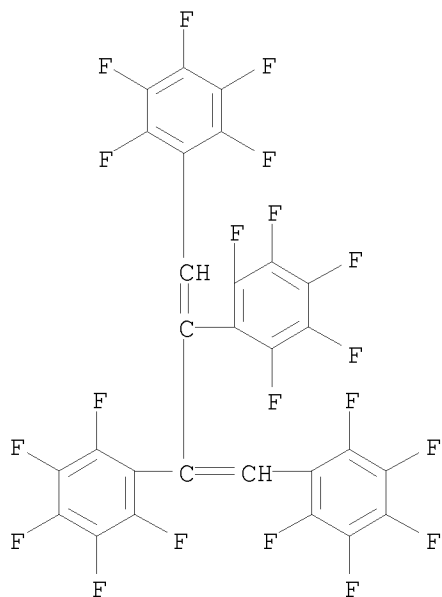


RN 649758-75-8 HCAPLUS  
 CN Benzaldehyde, 4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.

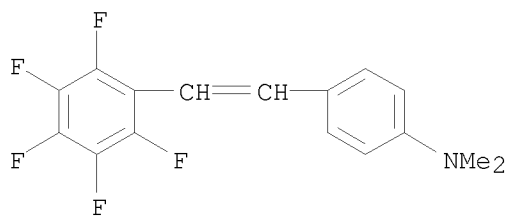


L9 ANSWER 4 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2008:992778 HCAPLUS  
 DOCUMENT NUMBER: 149:266905  
 TITLE: Dicarbonylbis(cyclopentadienyl)zirconium  
 AUTHOR(S): Snead, Thomas E.  
 CORPORATE SOURCE: USA  
 SOURCE: e-EROS Encyclopedia of Reagents for Organic Synthesis  
 (2001), No pp. given. John Wiley & Sons, Ltd.:  
 Chichester, UK.  
 CODEN: 69KUHI  
 URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/104554785/HOME>  
 DOCUMENT TYPE: Conference; General Review; (online computer file)  
 LANGUAGE: English  
 AB A review of the article Dicarbonylbis(cyclopentadienyl)zirconium.  
 IT 95411-45-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (Dicarbonylbis(cyclopentadienyl)zirconium)  
 RN 95411-45-3 HCAPLUS  
 CN Benzene, 1,1',1'',1'''-(1,3-butadiene-1,2,3,4-tetrayl)tetrakis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)



L9 ANSWER 5 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:901802 HCAPLUS  
 DOCUMENT NUMBER: 140:225613  
 TITLE: Excimer and intramolecular charge transfer chemiluminescence from electrogenerated ion radicals of donor-acceptor stilbenoids  
 AUTHOR(S): Chen, Chih-Yuan; Ho, Jinn-Hsuan; Wang, Shun-Li; Ho, Tong-Ing  
 CORPORATE SOURCE: Department of Chemistry, National Taiwan University, Taipei, Taiwan  
 SOURCE: Photochemical & Photobiological Sciences (2003), 2(11), 1232-1236  
 CODEN: PPSHCB; ISSN: 1474-905X  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Electrongenerated chemiluminescence (ECL) of a series of intramol. charge transfer (ICT) donor-acceptor stilbenoid systems (2-9) bearing N,N-dimethylamino group as donor and pyridine, thiophene, quinoline or aryl groups as acceptors are studied. Most of the compds. (3-9) show ICT ECL through direct annihilation of the radical ions. For the weaker ICT compound (2), excimer ECL is observed instead.  
 IT 664344-43-8  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)  
 (spectral properties of intramol. donor-acceptor stilbene derivs. and chemiluminescence generated by annihilation of electrogenerated ion radicals of these compds.)  
 RN 664344-43-8 HCAPLUS  
 CN Benzenamine, N,N-dimethyl-4-[2-(2,3,4,5,6-pentafluorophenyl)ethenyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)  
 REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2003:686967 HCAPLUS  
 DOCUMENT NUMBER: 139:371205  
 TITLE: A potential J aggregate molecular system: crystal packing and optical properties of 4,4'-bis(2,3,4,5,6-pentafluorostyryl)stilbene  
 AUTHOR(S): Capelli, R.; Loi, M. A.; Taliani, C.; Hansen, H. B.; Murgia, M.; Ruani, G.; Muccini, M.; Lovenich, P. W.; Feast, W. J.  
 CORPORATE SOURCE: Bologna Division, Istituto per lo Studio dei Materiali Nanostrutturati (ISMN) del CNR, Bologna, 40129, Italy  
 SOURCE: Synthetic Metals (2003), 139(3), 909-912  
 CODEN: SYMEDZ; ISSN: 0379-6779  
 PUBLISHER: Elsevier Science B.V.  
 DOCUMENT TYPE: Journal

LANGUAGE: English

AB A preliminary condition for an organic semiconductor to display the appealing spectroscopic properties of J aggregates in the solid state is to possess a favorable mol. packing. 4,4'-Bis(2,3,4,5,6-pentafluorostyryl)stilbene crystallizes in a brickwall fashion that is promising with respect to the possible formation of J aggregates in the solid. The authors report a systematic spectroscopic study of 4,4'-bis(2,3,4,5,6-pentafluorostyryl)stilbene in powder, solution, thin films and single crystals. Solns. of 4,4'-bis(2,3,4,5,6-pentafluorostyryl)stilbene with increasing concentration starting from 10<sup>-6</sup> M were prepared and characterized. Thin films were grown by high vacuum sublimation on substrates with different hydrophobicity (viz. sapphire, mica and HOPG) to explore the effect of substrate surface energy on the photoluminescence (PL) properties of thin films. CH<sub>2</sub>Cl<sub>2</sub>. Single crystals were grown by vacuum sublimation and the corresponding polarized photoluminescence spectra were measured at 4 K.

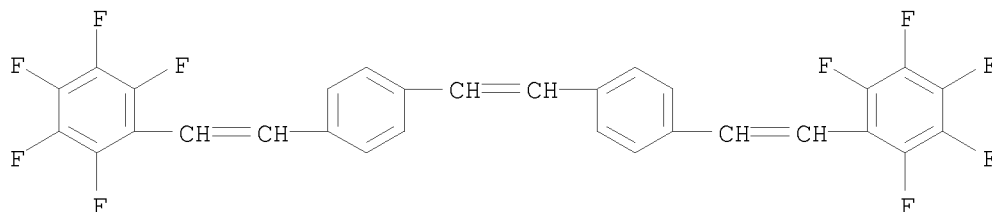
IT 620171-55-3

RL: PRP (Properties)

(crystal packing and optical properties of potential J aggregate mol. system)

RN 620171-55-3 HCAPLUS

CN Benzene, 1,1'-(1,2-ethenediyl)bis[4-[2-(pentafluorophenyl)ethenyl]]- (9CI)  
(CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:248144 HCAPLUS

DOCUMENT NUMBER: 139:68873

TITLE: The influence of  $\sigma$  and  $\pi$  acceptors on  
two-photon absorption and solvatochromism of dipolar  
and quadrupolar unsaturated organic compounds  
AUTHOR(S): Strehmel, Bernd; Sarker, Ananda M.; Detert, Heiner  
CORPORATE SOURCE: Institute of Chemistry, Physical Chemistry, University  
of Potsdam, Golm, 14476, Germany  
SOURCE: ChemPhysChem (2003), 4(3), 249-259

CODEN: CPCHFT; ISSN: 1439-4235

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two-photon absorption cross sections  $\delta$  and solvatochromic properties were determined for a series of quadrupolar and dipolar compds. by using femtosecond excitation in the spectral range between 710 and 960 nm. The compds. investigated were distyrylbenzenes and polyenes bearing appropriate  $\pi$  or  $\sigma$  acceptors. The  $\delta$  values for the centrosym. compds. trans,trans-1,4-bis[2-(2',5'-dihexyloxy)phenylethenyl]-2,3,5,6-tetrafluorobenzene (6), trans,trans-1,4-bis[2-(4'-dibutylamino)phenylethenyl]-2,3,5,6-tetrafluorobenzene (2),

trans,trans-1,4-bis[2-(4'-dimethylamino)phenylbutadienyl]-2,3,5,6-tetrafluorobenzene (7), trans,trans-1,4-bis[2-(4'-dimethylamino)phenylethenyl]-2,5-dicyanobenzene (4) and trans,trans-1,4-bis[2-(4'-dimethylamino)phenylethenyl]-2-propylsulfonyl-5-(2-ethylhexyl)sulfonylbenzene (3) are on the order of 600, 1400, 1700, 300, and 4100 + 10-50 cm<sup>4</sup>s photon<sup>-1</sup>, resp. The corresponding dipolar compds. trans-2-(4'-dimethylaminophenyl)ethenyl-2,3,4,5,6-pentafluorobenzene (8), trans-4-(4'-dimethylaminophenyl)butadienyl-2,3,4,5,6-pentafluorobenzene (9), trans-6-(4'-dimethylaminophenyl)hexatrienyl-2,3,4,5,6-pentafluorobenzene (10) were addnl. investigated. All centrosym. compds. are good fluorescent materials, while the dipolar chromophores 8-10 exhibit low fluorescence quantum yields. Solvatochromism was also observed for the fluorophores 2-10 as a result of intramol. charge transfer (ICT). Furthermore, a reasonable correlation was obtained between measured and calculated  $\delta$ . Quantum chemical calcns. were performed by using INDO Hamiltonian with a MRDCI scheme. The results show that the sum over states (SOS) expression for the second hyperpolarizability  $\gamma$  is appropriate to describe the mechanism of two-photon absorption. Mechanistic investigations of quadrupolar compds. showed that the energy of the two-photon excited state is higher than S1.

IT 551897-98-4P

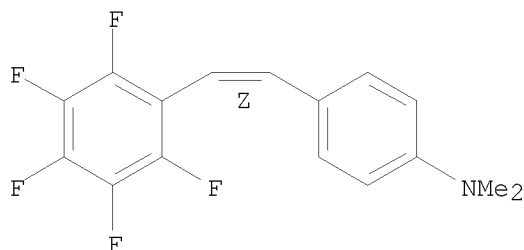
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(cis-trans isomerization; the influence of  $\sigma$  and  $\pi$  acceptors on two-photon absorption and solvatochromism of dipolar and quadrupolar unsatd. organic compds.)

RN 551897-98-4 HCAPLUS

CN Benzenamine, N,N-dimethyl-4-[(1Z)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-(CA INDEX NAME)

Double bond geometry as shown.



IT 368421-21-0P

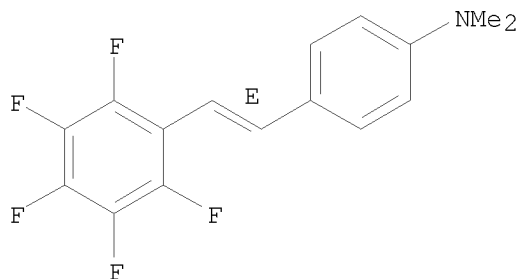
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(the influence of  $\sigma$  and  $\pi$  acceptors on two-photon absorption and solvatochromism of dipolar and quadrupolar unsatd. organic compds.)

RN 368421-21-0 HCAPLUS

CN Benzenamine, N,N-dimethyl-4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-(CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 96 THERE ARE 96 CAPLUS RECORDS THAT CITE THIS  
RECORD (99 CITINGS)  
REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:235803 HCAPLUS

DOCUMENT NUMBER: 138:368654

TITLE: Easy Preparation of Cobalt Corrole and Hexaphyrin and  
Isolation of New Oligopyrroles in the Solvent-Free  
Condensation of Pyrrole with Pentafluorobenzaldehyde

AUTHOR(S): Simkhovich, Liliya; Goldberg, Israel; Gross, Zeev

CORPORATE SOURCE: Department of Chemistry and Institute of Catalysis  
Science and Technology, Technion - Israel Institute of  
Technology, Haifa, 32000, Israel

SOURCE: Organic Letters (2003), 5(8), 1241-1244

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:368654

AB Following the discovery that meso-substituted corroles are formed in  
solvent-free condensation of pyrrole with aldehydes, a small variation in  
the methodol. is suitable for facile synthesis of Co(III) corrole and  
hexaphyrin. The previously reported cobalt tris(pentafluorophenyl)corrole  
triphenylphosphine complex, and reduced hexaphyrin as well as new  
noncyclic products, were fully characterized by spectroscopy and x-ray  
crystallog.

IT 521286-10-2P

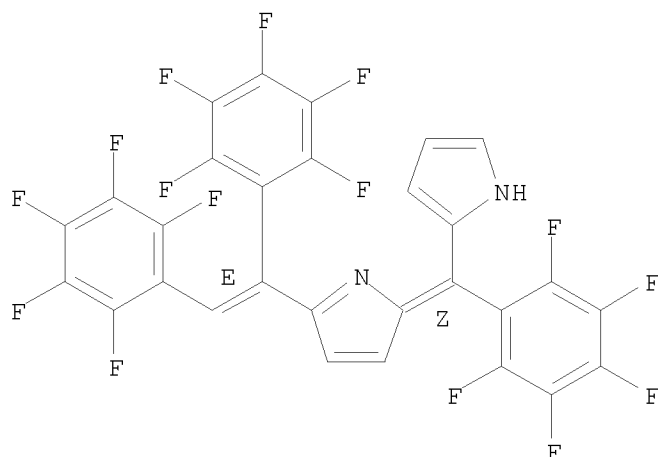
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal structure)

RN 521286-10-2 HCAPLUS

CN 1H-Pyrrole, 2-[(Z)-[5-[(1E)-1,2-bis(2,3,4,5,6-pentafluorophenyl)ethenyl]-  
2H-pyrrol-2-ylidene](2,3,4,5,6-pentafluorophenyl)methyl]- (CA INDEX NAME)

Double bond geometry as shown.





OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)  
 REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:207600 HCAPLUS

DOCUMENT NUMBER: 138:385865

TITLE: Regioselective Coupling of Pentafluorophenyl Substituted Alkynes: Mechanistic Insight into the Zirconocene Coupling of Alkynes and a Facile Route to Conjugated Polymers Bearing Electron-Withdrawing Pentafluorophenyl Substituents

AUTHOR(S): Johnson, Samuel A.; Liu, Feng-Quan; Suh, Min Chul; Zuercher, Stefan; Haufe, Markus; Mao, Shane S. H.; Tilley, T. Don

CORPORATE SOURCE: Department of Chemistry, University of California Berkeley, Berkeley, CA, 94720-1460, USA

SOURCE: Journal of the American Chemical Society (2003), 125(14), 4199-4211

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The reaction of Cp<sub>2</sub>ZrCl<sub>2</sub> with 2 equiv of BuLi at -78 °C, followed by the addition of an unsym. tetra- or pentafluorophenyl substituted alkyne R<sub>1</sub>C.tplbond.CArf (R<sub>1</sub>, Arf = (CH<sub>2</sub>)<sub>4</sub>Me, p-C<sub>6</sub>F<sub>4</sub>H; Me, p-C<sub>6</sub>F<sub>4</sub>H; Ph, C<sub>6</sub>F<sub>5</sub>), resulted in regioselective couplings of these alkynes to zirconacyclopentadienes in which the Arf substituents preferentially adopt the 3,4-positions (ββ) of the zirconacyclopentadiene ring. With Cp<sub>2</sub>Zr(py)(Me<sub>3</sub>SiC.tplbond.CSiMe<sub>3</sub>) as the zirconocene reagent, the couplings could be carried out at room temperature; however, at higher temps. significant quantities of the 2,4-fluoroaryl substituted (αβ) isomers were also formed. None of the conditions employed produced the 2,5-fluoroaryl substituted (αα) isomers. These fluoroaryl-substituted zirconacyclopentadienes were readily converted to butadienes via reactions with acids. The zirconacyclopentadiene Cp<sub>2</sub>ZrC<sub>4</sub>-2,5-Ph<sub>2</sub>-3,4-(C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>, which resulted from the coupling of PhC.tplbond.C(C<sub>6</sub>F<sub>5</sub>), was converted to the corresponding thiophene by reaction with S<sub>2</sub>Cl<sub>2</sub>, and to an arene by reaction with MeO<sub>2</sub>CC.tplbond.CC(OMe)<sub>2</sub>/CuCl. Mechanistic studies on zirconocene couplings of (p-CF<sub>3</sub>C<sub>6</sub>H<sub>4</sub>)C.tplbond.C(p-MeC<sub>6</sub>H<sub>4</sub>) indicate that the observed regioselectivities are determined by an electronic factor that controls the orientation of at least one of the two alkynes as they are

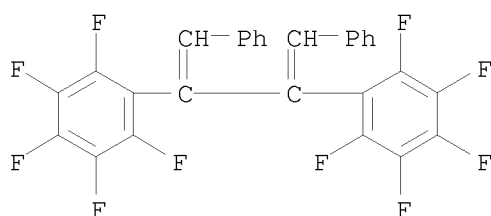
coupled. Addnl., these studies suggest an unsym. transition state for the zirconocene coupling of alkynes, and this is supported by DFT calcns. The reaction of [(C6F5)C.tplbond.CCH2]2CH2 with Cp2Zr(py)(Me3SiC.tplbond.CSiMe3) resulted in a zirconacyclopentadiene in which the pentafluorophenyl substituents have been forced into the 2,5-positions ( $\alpha\alpha$ ). Zirconocene coupling of the diyne (C6F5)C.tplbond.C-1,4-C6H4-C.tplbond.C(C6F5) provided a route to conjugated polymers bearing electron-withdrawing pentafluorophenyl groups.

IT 79211-76-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(hydrolysis product; zirconocene catalysis mechanism in regioselective coupling of pentafluorophenyl-substituted alkynes)

RN 79211-76-0 HCAPLUS

CN Benzene, 1,1'-[1,2-bis(phenylmethylene)-1,2-ethanediyl]bis[2,3,4,5,6-pentafluoro- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 38 THERE ARE 38 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)  
REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 93 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:928368 HCAPLUS

DOCUMENT NUMBER: 138:153011

TITLE: The Crystallographic Structure of a Lewis Acid-Assisted Chiral Bronsted Acid as an Enantioselective Protonation Reagent for Silyl Enol Ethers

AUTHOR(S): Ishihara, Kazuaki; Nakashima, Daisuke; Hiraiwa, Yukihiro; Yamamoto, Hisashi

CORPORATE SOURCE: Graduate School of Engineering, Nagoya University, Nagoya, 464-8603, Japan

SOURCE: Journal of the American Chemical Society (2003), 125(1), 24-25

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:153011

AB It is difficult to control the enantioselectivity in the protonation of silyl enol ethers with simple chiral Bronsted acids, mainly due to bond flexibility between the proton and its chiral counterion, the orientational flexibility of the proton, and the fact that the proton sources available are limited to acidic compds. such as chiral carboxylic acids. To overcome these difficulties, a Lewis acid-assisted chiral Bronsted acid (LBA) system was developed. Optically active 1,2-diarylethane-1,2-diol derivative·SnCl4 as a new type of LBA for the enantioselective protonation as well as its crystallog. structure is reported. Thus, enantioselective protonation of 2-phenyl-1-(trimethylsilyloxy)cyclohex-1-ene with (R,R)-(+)-2-methoxy-1,2-diphenylethanol·SnCl4 in CH2Cl2 gave

(S)-(-)-2-phenylcyclohexanone in 66% enantiomeric excess. The crystal structure of (R,R)-(+)-2-methoxy-1,2-diphenylethanol·SnCl<sub>4</sub> was determined

IT 14992-40-6

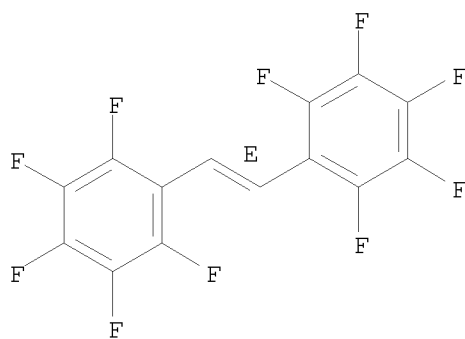
RL: RCT (Reactant); RACT (Reactant or reagent)

(Sharpless syn-dihydroxylation; preparation, crystal structure, and Lewis acid-assisted chiral Bronsted acid as an enantioselective protonation reagent for silyl enol ethers)

RN 14992-40-6 HCAPLUS

CN Benzene, 1,1'-(1E)-1,2-ethenediylbis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 43 THERE ARE 43 CAPLUS RECORDS THAT CITE THIS RECORD (43 CITINGS)  
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 19 not py>2002  
9811831 PY>2002  
L10 87 L9 NOT PY>2002

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L10 ANSWER 1 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1383639 HCAPLUS

DOCUMENT NUMBER: 149:555128

TITLE: Synthetic applications of phosphoryl-stabilized anions

AUTHOR(S): Wadsworth, William S., Jr.

CORPORATE SOURCE: South Dakota State Univ., Brookings, SD, USA

SOURCE: Organic Reactions (Hoboken, NJ, United States) (1977), 25, No pp. given

CODEN: ORHNBA

URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/107610747/HOME>

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal; General Review; (online computer file)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 149:555128

AB A review of the article Synthetic applications of phosphoryl-stabilized anions.

IT 19292-25-2P

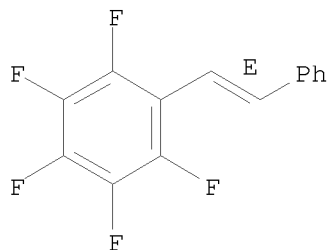
RL: SPN (Synthetic preparation); PREP (Preparation)

(Synthetic Applications of Phosphoryl-Stabilized Anions)

RN 19292-25-2 HCAPLUS

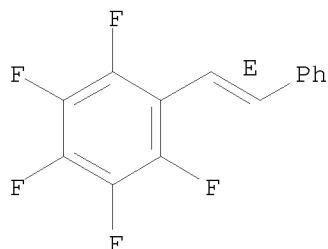
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



L10 ANSWER 2 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2008:994601 HCAPLUS  
DOCUMENT NUMBER: 149:307000  
TITLE: Dichloroborane-Dimethyl Sulfide  
AUTHOR(S): Zaidlewicz, Marek; Brown, Herbert C.; Ramachandran, P.  
Veeraraghavan; Chandra, U. Subash  
CORPORATE SOURCE: Pol.  
SOURCE: e-EROS Encyclopedia of Reagents for Organic Synthesis  
(2001), No pp. given. John Wiley & Sons, Ltd.:  
Chichester, UK.  
CODEN: 69KUHI  
URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/104554785/HOME>  
DOCUMENT TYPE: Conference; General Review; (online computer file)  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 149:307000  
AB A review of the article Dichloroborane-Dimethyl Sulfide.  
IT 19292-25-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Dichloroborane-Dimethyl Sulfide)  
RN 19292-25-2 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.

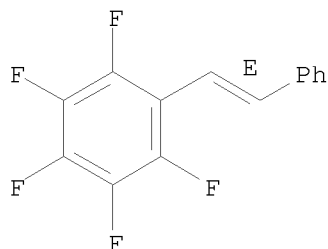


L10 ANSWER 3 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2008:994498 HCAPLUS  
DOCUMENT NUMBER: 149:306901  
TITLE: Dirhodium(II) Tetraacetate  
AUTHOR(S): Doyle, Michael P.  
CORPORATE SOURCE: USA  
SOURCE: e-EROS Encyclopedia of Reagents for Organic Synthesis  
(2001), No pp. given. John Wiley & Sons, Ltd.:  
Chichester, UK.  
CODEN: 69KUHI

URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/104554785/HOME>

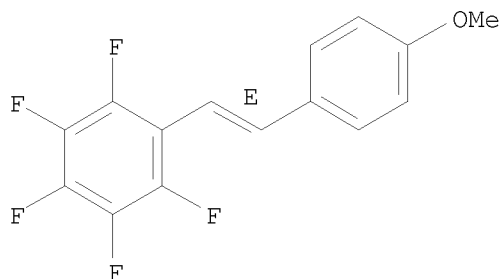
DOCUMENT TYPE: Conference; General Review; (online computer file)  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 149:306901  
AB A review of the article Dirhodium(II) Tetraacetate.  
IT 19292-25-2P 78622-66-9P 109384-58-9P  
649758-72-5P 649758-75-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(Dirhodium(II) Tetraacetate)  
RN 19292-25-2 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



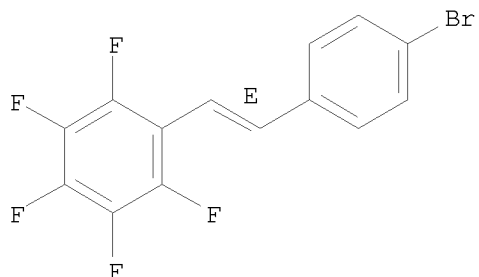
RN 78622-66-9 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-(4-methoxyphenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



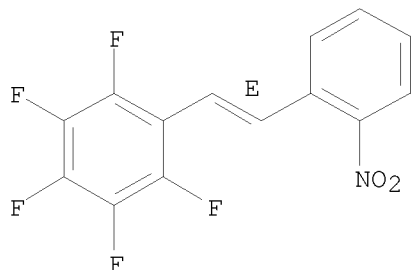
RN 109384-58-9 HCAPLUS  
CN Benzene, 1-[(1E)-2-(4-bromophenyl)ethenyl]-2,3,4,5,6-pentafluoro- (CA INDEX NAME)

Double bond geometry as shown.



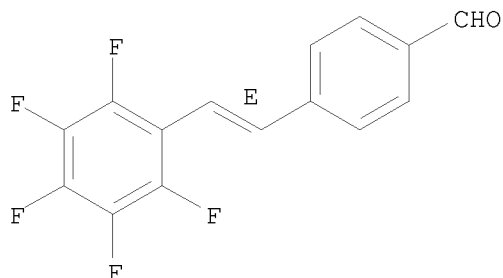
RN 649758-72-5 HCAPLUS  
CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-(2-nitrophenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.

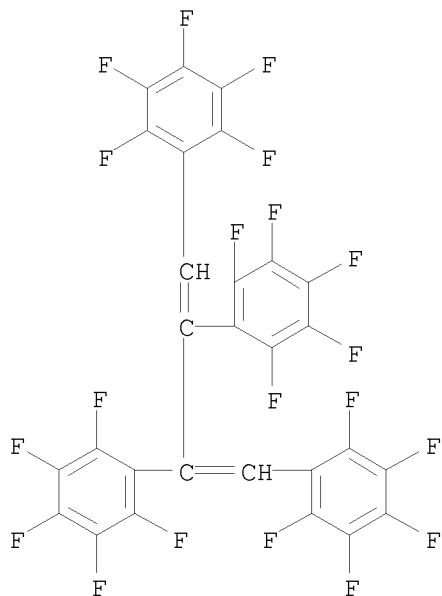


RN 649758-75-8 HCAPLUS  
CN Benzaldehyde, 4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



L10 ANSWER 4 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2008:992778 HCAPLUS  
DOCUMENT NUMBER: 149:266905  
TITLE: Dicarboxylbis(cyclopentadienyl)zirconium  
AUTHOR(S): Snead, Thomas E.  
CORPORATE SOURCE: USA  
SOURCE: e-EROS Encyclopedia of Reagents for Organic Synthesis  
(2001), No pp. given. John Wiley & Sons, Ltd.:  
Chichester, UK.  
CODEN: 69KUHI  
URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/104554785/HOME>  
DOCUMENT TYPE: Conference; General Review; (online computer file)  
LANGUAGE: English  
AB A review of the article Dicarboxylbis(cyclopentadienyl)zirconium.  
IT 95411-45-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(Dicarboxylbis(cyclopentadienyl)zirconium)  
RN 95411-45-3 HCAPLUS  
CN Benzene, 1,1',1'',1'''-(1,3-butadiene-1,2,3,4-tetrayl)tetrakis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)



L10 ANSWER 5 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:661475 HCAPLUS

DOCUMENT NUMBER: 137:325003

TITLE: A Warning on the Use of Radical Traps as a Test for Radical Mechanisms: They React with Palladium Hydrido Complexes

AUTHOR(S): Albeniz, Ana C.; Espinet, Pablo; Lopez-Fernandez, Raquel; Sen, Ayusman

CORPORATE SOURCE: Departamento de Quimica Inorganica, Facultad de Ciencias, Universidad de Valladolid, Valladolid, 47005, Spain

SOURCE: Journal of the American Chemical Society (2002), 124(38), 11278-11279

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:325003

AB Typical radical traps (galvinoxyl, TEMPO, DPPH) react with Pd hydrides, sometimes at rates competitive with those of Pd hydride catalyzed reactions that follow an insertion mechanism (for example, alkene isomerization). Thus, pos. results for radical reaction tests can be misleading. The complexes with more polarizable (neutral complexes rather than cationic) and more accessible hydrides, and the less sterically protected radical traps, react faster.

IT 19292-25-2P

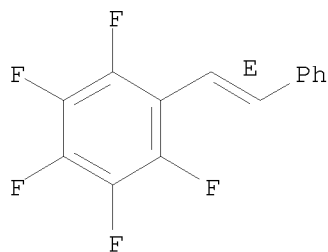
RL: SPN (Synthetic preparation); PREP (Preparation)

(radical traps react with palladium hydrido complexes and complicate tests for radical mechanisms)

RN 19292-25-2 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS  
RECORD (23 CITINGS)  
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:519369 HCAPLUS

DOCUMENT NUMBER: 138:4192

TITLE: Osmium-catalyzed dihydroxylation of olefins in acidic  
media: old process, new tricks

AUTHOR(S): Dupau, Philippe; Epple, Robert; Thomas, Allen A.;  
Fokin, Valery V.; Sharpless, K. Barry

CORPORATE SOURCE: Department of Chemistry and The Skaggs Institute for  
Chemical Biology, BCC-315, The Scripps Research  
Institute, La Jolla, CA, 92037, USA

SOURCE: Advanced Synthesis & Catalysis (2002), 344(3+4),  
421-433

CODEN: ASCAF7; ISSN: 1615-4150

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:4192

AB A screen of over 500 diversely functionalized additives in  
osmium-catalyzed dihydroxylation has uncovered that electron-deficient  
olefins are converted into the corresponding diols much more efficiently  
when the pH of the reaction medium is maintained on the acidic side.  
Further studies have identified citric acid as the additive of choice, for  
it allows preparation of very pure diols in yields generally exceeding 90%. As  
described here, a much wider range of olefin classes can now be  
successfully dihydroxylated. The process is exptl. simple, in most cases  
involving little more than dissolving the reactants in water or a  
water/tertbutyl alc. mixture, stirring them, and filtering off the pure diol  
product.

IT 14992-40-6

RL: RCT (Reactant); RACT (Reactant or reagent)

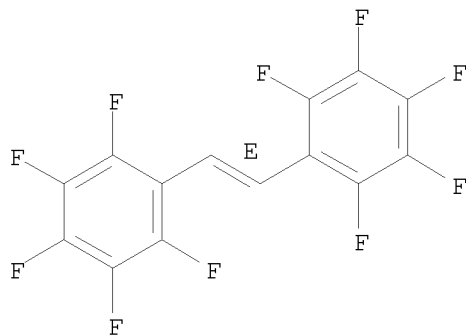
(preparation of diols by osmium-catalyzed dihydroxylation of  
electron-deficient olefins)

RN 14992-40-6 HCAPLUS

CN Benzene, 1,1'-(1E)-1,2-ethenediylbis[2,3,4,5,6-pentafluoro- (CA INDEX  
NAME)

Double bond geometry as shown.





OS.CITING REF COUNT: 74 THERE ARE 74 CAPLUS RECORDS THAT CITE THIS  
RECORD (75 CITINGS)  
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:387959 HCAPLUS

DOCUMENT NUMBER: 137:176741

TITLE: Optical properties and photoexcitations of an organic  
blue emitter embedded in a polymeric active matrix  
AUTHOR(S): Giovannella, U.; Botta, C.; Gurioli, M.; Papagni, A.;  
Tubino, R.; Maiorana, S.; Del Buttero, P.; Alderighi,  
D.; Kudrna, J.

CORPORATE SOURCE: CNR, Istituto di Chimica delle Macromolecole, Milan,  
20133, Italy

SOURCE: Journal of Applied Physics (2002), 91(10, Pt. 1),  
6511-6515

CODEN: JAPIAU; ISSN: 0021-8979

PUBLISHER: American Institute of Physics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The doping of a widely used active polymeric matrix, the polyvinyl  
carbazole (PVK), with an organic blue emitter was studied by both continuous  
wave and time resolved photoluminescence spectroscopy. The overall  
emission efficiency of the blend is controlled by two processes: the  
resonant transfer from the donor to the acceptor and the hopping between  
the donor sites. Because of the observed spectral variations of the emission  
spectrum of PVK (donor) with the temperature, both processes exhibit a strong,  
albeit opposite temperature dependence. The existence of the hopping process  
accounts for the sharp increase of the transfer efficiency with the  
concentration, not predicted by the Foerster theory.

IT 448193-73-5

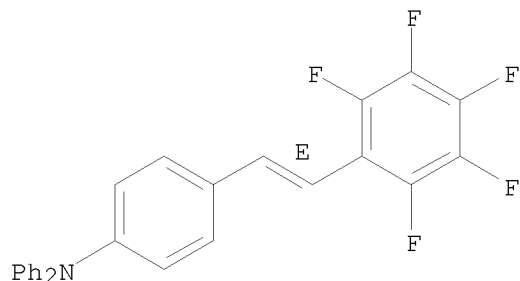
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP  
(Physical process); PROC (Process)

(optical properties and photoexcitations of organic blue emitter embedded  
in a polymeric active matrix)

RN 448193-73-5 HCAPLUS

CN Benzenamine, 4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-N,N-diphenyl-  
(CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS  
RECORD (13 CITINGS)  
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:323583 HCAPLUS

DOCUMENT NUMBER: 137:201110

TITLE: Synthesis and spectroscopic and NLO properties of  
"push-pull" structures incorporating the inductive  
electron-withdrawing pentafluorophenyl group

AUTHOR(S): Papagni, Antonio; Maiorana, Stefano; Del Buttero,  
Paola; Perdicchia, Dario; Cariati, Franco; Cariati,  
Elena; Marcolli, Walter

CORPORATE SOURCE: Dipartimento di Scienza dei Materiali, Universita  
degli Studi di Milano "Bicocca", Milan, 20125, Italy

SOURCE: European Journal of Organic Chemistry (2002), (8),  
1380-1384

CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:201110

AB A series of push-pull mols., each incorporating a pentafluorophenyl ring  
as an inductive accepting group, has been synthesized. The nonlinear  
optical properties of these compds. were measured in solution by EFISH  
(operating at 1907 nm) and in the solid state by the Kurtz powder  
technique (at 1907 nm). Values of  $\mu\beta$ , the product of the mol.  
dipole moment and its first-order hyperpolarizability, of up to 200  
+ 10<sup>-48</sup> esu were obtained.

IT 368421-21-0P 448193-73-5P

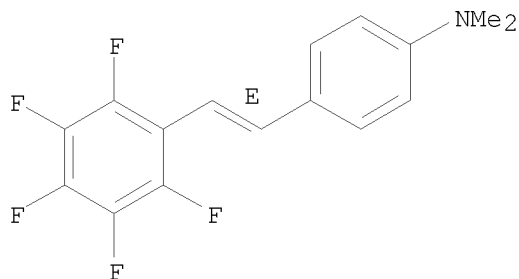
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and spectroscopic and nonlinear optical properties of push-pull  
structures with a pentafluorophenyl end group)

RN 368421-21-0 HCAPLUS

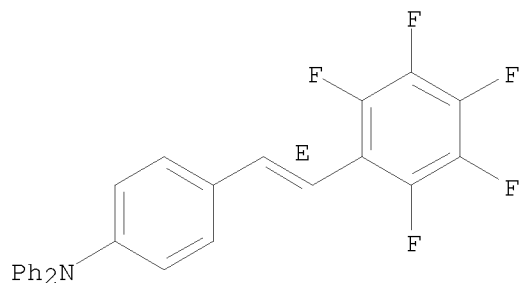
CN Benzenamine, N,N-dimethyl-4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-  
(CA INDEX NAME)

Double bond geometry as shown.



RN 448193-73-5 HCAPLUS  
 CN Benzenamine, 4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-N,N-diphenyl-  
 (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
 (6 CITINGS)  
 REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:879514 HCAPLUS

DOCUMENT NUMBER: 136:263047

TITLE: Preparation of  $\alpha$ -free pyrroles with  
 perfluorinated groups at the  $\beta$ -positions

AUTHOR(S): Uno, Hidemitsu; Inoue, Kentarou; Inoue, Takashi;  
 Fumoto, Yumiko; Ono, Noboru

CORPORATE SOURCE: Advanced Instrumentation Center for Chemical Analysis,  
 Ehime University, Matsuyama, 790-8577, Japan

SOURCE: Synthesis (2001), (15), 2255-2258

CODEN: SYNTBF; ISSN: 0039-7881

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:263047

AB Et pyrrole-2-carboxylates bearing trifluoromethyl and/or pentafluorophenyl  
 groups at the  $\beta$ -positions were converted to the corresponding  
 $\alpha$ -free pyrroles in good yields by reduction with  $\text{LiAlH}_4$ , oxidation with  
 $\text{MnO}_2$  and decarbonylation with  $\text{Pd/C}$ .

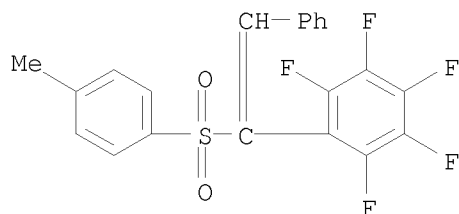
IT 405196-63-6P 405196-64-7P 405196-65-8P  
 405196-66-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation of  $\alpha$ -free pyrroles with perfluorinated groups at  
 $\beta$ -positions)

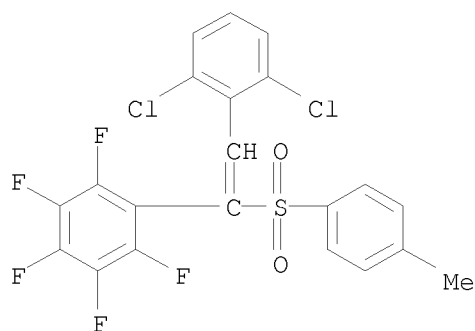
RN 405196-63-6 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-[1-[(4-methylphenyl)sulfonyl]-2-phenylethenyl]- (CA INDEX NAME)



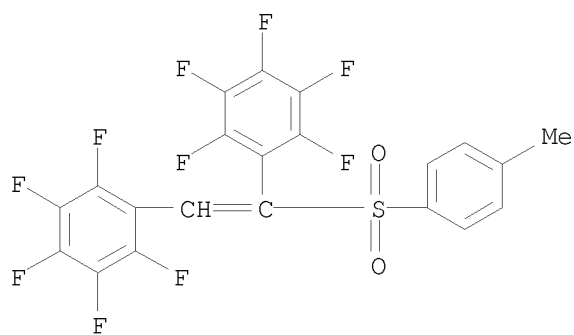
RN 405196-64-7 HCAPLUS

CN Benzene, 1-[2-(2,6-dichlorophenyl)-1-[(4-methylphenyl)sulfonyl]ethenyl]-2,3,4,5,6-pentafluoro- (CA INDEX NAME)



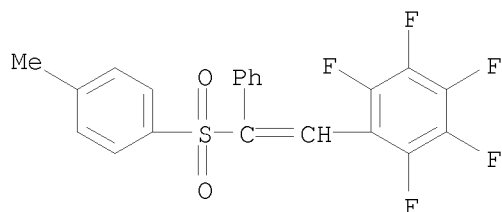
RN 405196-65-8 HCAPLUS

CN Benzene, 1,1'-[1-[(4-methylphenyl)sulfonyl]-1,2-ethenediyl]bis[2,3,4,5,6-pentafluoro- (9CI) (CA INDEX NAME)



RN 405196-66-9 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-[2-[(4-methylphenyl)sulfonyl]-2-phenylethenyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)  
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:864236 HCAPLUS

DOCUMENT NUMBER: 136:225824

TITLE: Two new acceptor building blocks for 'high Tc'  
coordination polymer magnets

AUTHOR(S): Kaul, Bharat B.; Yee, Gordon T.

CORPORATE SOURCE: Department of Chemistry and Biochemistry, University  
of Colorado, Boulder, CO, 80309, USA

SOURCE: Inorganica Chimica Acta (2001), 326(1), 9-12  
CODEN: ICHAA3; ISSN: 0020-1693

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:225824

AB Two new olefinic 1-electron acceptor building blocks for ferrimagnetic  
coordination polymer networks were synthesized. These compds.,  
pentafluorophenyltricyanoethylene (PTCE) and i-hexacyanodivinylbenzene  
(i-HCDVB, the 'meta' isomer), each react with V hexacarbonyl to give an  
insol. air-sensitive solid that is magnetically ordered < 240 and 120 K,  
resp. In contrast, the para isomer, HCDVB, reacts similarly with V(CO)<sub>6</sub>,  
but does not give an ordering product. Installation of the tricyanovinyl  
function group to obtain the new acceptors proceeds simply from the  
appropriately substituted benzaldehyde, suggesting a convenient route for  
the preparation of other such mols.

IT 402828-36-8

RL: PRP (Properties)  
(magnetization properties)

RN 402828-36-8 HCAPLUS

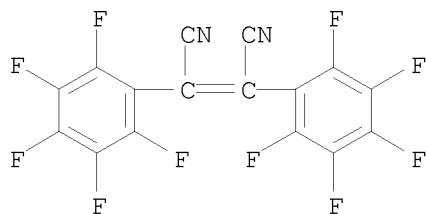
CN 2-Butenedinitrile, 2,3-bis(pentafluorophenyl)-, radical ion(1-),  
vanadium(2+), (2E)-, compd. with acetonitrile (9CI) (CA INDEX NAME)

CM 1

CRN 261172-47-8

CMF C16 F10 N2 . 1/2 V

CCI RIS



●<sub>1/2</sub> V(II) <sup>2+</sup>

CM 2

CRN 75-05-8

CMF C2 H3 N

H<sub>3</sub>C—C≡N

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)  
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
267.70	528.55

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-35.70	-44.20

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 30, 2010 (20100430/UP).

=> d ibib abs hitstr 11-20 110

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L10 ANSWER 11 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:785483 HCAPLUS

DOCUMENT NUMBER: 136:69619

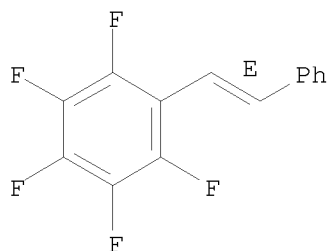
TITLE: Catalytic System for Heck Reactions Involving  
Insertion into Pd-(Perfluoro-organyl) Bonds

AUTHOR(S): Albeniz, Ana C.; Espinet, Pablo; Martin-Ruiz, Blanca;  
Milstein, David

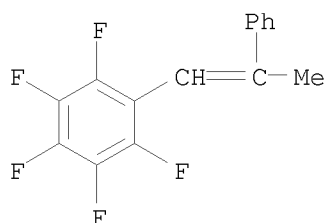
CORPORATE SOURCE: Departamento de Quimica Inorganica Facultad de  
Ciencias, Universidad de Valladolid, Valladolid,

47005, Spain  
 SOURCE: Journal of the American Chemical Society (2001),  
 123(46), 11504-11505  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 136:69619  
 AB [Pd(C6F5)Br(MeCN)2] and (Bu4N)2[Pd2(μ-Br)2(C6F5)Br2] (I) are effective  
 catalysts for the Heck reaction of pentafluorophenyl halides with alkenes.  
 Thus, C6F5Br was almost completely converted to (E)-PhCH:CHC6F5 on  
 reaction with styrene in presence of I and CaCO3 in N-methylpyrrolidone.  
 Lower yields, but higher turnover nos. were obtained when the amount of  
 catalyst was decreased. Similar results were obtained with CH2:CHCO2Me,  
 CH2:CMePh, and BuCH:CH2. C6F5Cl would react only in the presence of KF as  
 base.  
 IT 19292-25-2P 384343-71-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (catalytic system for Heck reactions of pentafluorophenyl halides)  
 RN 19292-25-2 HCAPLUS  
 CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



RN 384343-71-9 HCAPLUS  
 CN Benzene, 1,2,3,4,5-pentafluoro-6-(2-phenyl-1-propen-1-yl)- (CA INDEX NAME)



OS.CITING REF COUNT: 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS  
 RECORD (26 CITINGS)  
 REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2001:767195 HCAPLUS  
 DOCUMENT NUMBER: 136:53514  
 TITLE: An Exceptional Hydroboration of Substituted  
 Fluoroolefins Providing Tertiary Alcohols  
 AUTHOR(S): Ramachandran, P. Veeraraghavan; Jennings, Michael P.  
 CORPORATE SOURCE: Herbert C. Brown Center for Borane Research Department

of Chemistry, Purdue University, West Lafayette, IN, 47907-1393, USA

SOURCE: Organic Letters (2001), 3(23), 3789-3790  
CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

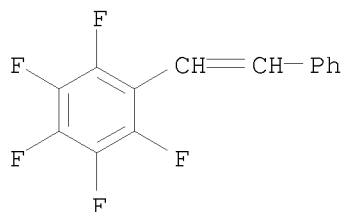
OTHER SOURCE(S): CASREACT 136:53514

AB A rare hydroboration-oxidation providing tertiary alcs. was achieved in the case of 1,1,2-perfluoroalkyl(aryl)ethylenes. Thus, hydroboration of F3C(CF2)3C(n-Pr):CHCH2CH2Me with HBCl2 and then oxidation with aqueous H2O2/NaOH gave F3C(CF2)3C(n-Pr)(OH)CH2CH2CH2Me in 82% yield and with >99% regioselectivity. The hydroboration of substituted perfluoroalkyl(aryl)ethylenes with dichloroborane revealed that the regioselectivity does not entirely depend on the electronics of the fluoro olefins.

IT 383145-53-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of fluoro, tertiary alcs. via regioselective hydroboration/oxidation of fluoro alkenes)

RN 383145-53-7 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-(2-phenylethenyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:662316 HCAPLUS

DOCUMENT NUMBER: 135:324652

TITLE: Fluorine substituted conjugated system: Intramolecular charge transfer, emission properties, two-photon excitation and prospective applications in polymer science

AUTHOR(S): Strehmel, Bernd; Sarker, Ananda M.

CORPORATE SOURCE: Institute of Physical Chemistry and Theoretical Chemistry, University of Potsdam, Golm, D-14476, Germany

SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2001), 42(2), 562-563  
CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER: American Chemical Society, Division of Polymer Chemistry

DOCUMENT TYPE: Journal; (computer optical disk)

LANGUAGE: English

AB New diphenylpolyenes containing pentafluorophenyl ring as electron acceptor and dimethylamino group as electron donor at the ends of the system were synthesized. The photophys. and photochem. properties (absorption and fluorescence) of these new fluorinated compds. were evaluated. Donor



acceptor pattern in the conjugated system led to efficient 2-photon absorption with large cross-section values. F substitution resulted in a considerable solvatochromic behavior in polar solvents.

IT 368421-21-0

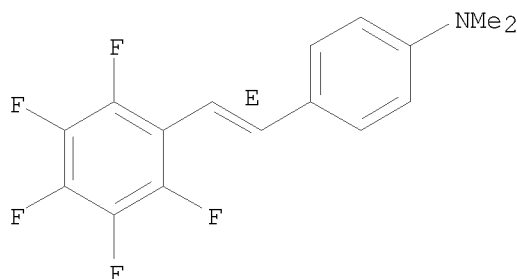
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(intramol. charge transfer and fluorescence and two-photon absorption and solvatochromism of)

RN 368421-21-0 HCAPLUS

CN Benzenamine, N,N-dimethyl-4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-(CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:323038 HCAPLUS

DOCUMENT NUMBER: 135:107105

TITLE: Synthesis and stereochemical characterization of optically active 1,2-diarylethane-1,2-diols: useful chiral controllers in the Ti-mediated enantioselective sulfoxidation

AUTHOR(S): Donnoli, Maria Irene; Scafato, Patrizia; Superchi, Stefano; Rosini, Carlo

CORPORATE SOURCE: Dipartimento di Chimica, Universita della Basilicata, Potenza, 85100, Italy

SOURCE: Chirality (2001), 13(5), 258-265

CODEN: CHRLEP; ISSN: 0899-0042

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:107105

AB A series of phenyl-substituted 1,2-diphenylethane-1,2-diols was prepared in high chemical (70-80%) and optical yields (.apprx.90%) by Sharpless syn-dihydroxylation of the corresponding (E)-1,2-diarylethenes, in turn obtained by McMurry or Wittig reactions. The enantiomeric excesses of the samples were determined by HPLC anal. using Chiralcel OD chiral stationary phase (CSP). This CSP was able to resolve all the diols, except for one, with  $\alpha$  values ranging between 1.10-1.64. In all cases the (R,R) antipode was eluted first. The (R,R) absolute configuration was assigned to the dextrorotatory (CHCl<sub>3</sub>) diols by analyzing the CD spectra of their 2,2-dimethyl-1,3-dioxolanes. In fact, the CD spectra of all these dioxolanes present a pos. couplet (210-180 nm range) which can be nonempirically related to the (R,R) absolute configuration of the two stereocenters.

IT 14992-40-6P

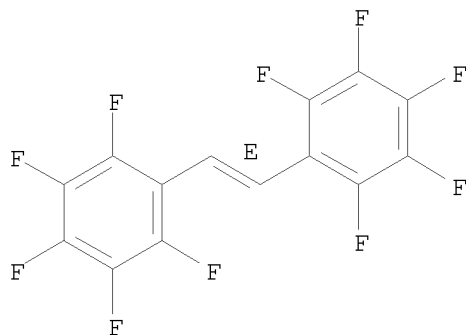
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(optically active 1,2-diarylethane-1,2-diols)

RN 14992-40-6 HCAPLUS

CN Benzene, 1,1'-(1E)-1,2-ethenediylbis[2,3,4,5,6-pentafluoro- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)  
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:139469 HCAPLUS

DOCUMENT NUMBER: 135:19401

TITLE: Synthesis and structure of 4,4'-bis(2,3,4,5,6-pentafluorostyryl)stilbene, a self-assembling J aggregate based on aryl-fluoroaryl interactions

AUTHOR(S): Feast, W. James; Lovenich, P. Wilfried; Puschmann, Horst; Taliani, Carlo

CORPORATE SOURCE: IRC in Polymer Science and Technology, Department of Chemistry, University of Durham, Durham, DH1 3LE, UK

SOURCE: Chemical Communications (Cambridge, United Kingdom) (2001), (5), 505-506  
CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:19401

AB The synthesis and characterization of 4,4'-bis(2,3,4,5,6-pentafluorostyryl)stilbene is described; this mol. forms a J aggregate by self-assembly based on aryl-fluoroaryl interactions.

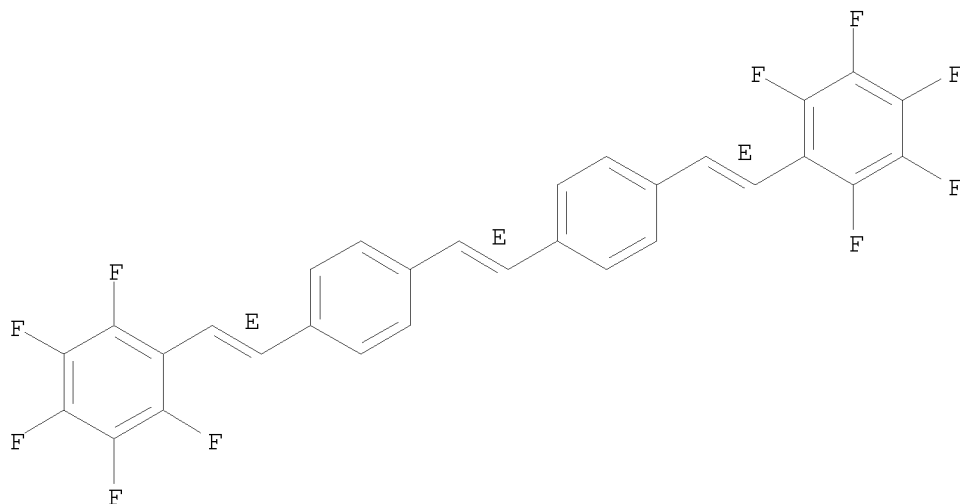
IT 343239-52-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and structure of 4,4'-bis(2,3,4,5,6-pentafluorostyryl)stilbene (self-assembling J aggregate based on aryl-fluoroaryl interactions))

RN 343239-52-1 HCAPLUS

CN Benzene, 1,1'-(1E)-1,2-ethenediylbis[4-[(1E)-2-(pentafluorophenyl)ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 65 THERE ARE 65 CAPLUS RECORDS THAT CITE THIS RECORD (66 CITINGS)  
 REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 16 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:92779 HCAPLUS

DOCUMENT NUMBER: 134:334094

TITLE: Exciplex formation with distyrylbenzene derivatives and N,N-dimethylaniline

AUTHOR(S): Wang, S.; Bazan, G. C.

CORPORATE SOURCE: Departments of Chemistry and Materials, Center for Polymer and Organic Solids, University of California, Santa Barbara, CA, 93106, USA

SOURCE: Chemical Physics Letters (2001), 333(6), 437-443  
 CODEN: CHPLBC; ISSN: 0009-2614

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Exciplex formation between N,N-dimethylaniline and a series of distyrylbenzene derivs. with varying structures was studied by cyclic voltammetry and fluorescence spectroscopy. The frequency of exciplex emission obeys the Weller equation. Increasing the electron affinity of the acceptor red-shifts emission, with a concomitant decrease in fluorescence efficiency. Increasing the conjugation length of the acceptor decreases its excited state singlet energy more quickly than its electron affinity. As a result, exciplex formation is discouraged with increasing conjugation length.

IT 128207-26-1 246258-72-0

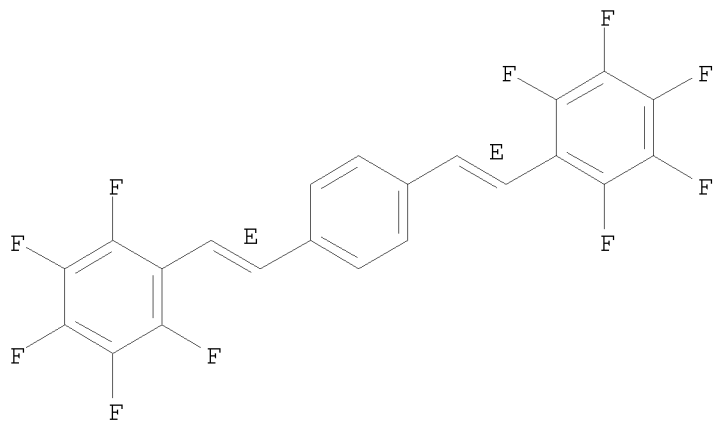
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(exciplex formation between dimethylaniline and distyrylbenzene derivs.)

RN 128207-26-1 HCAPLUS

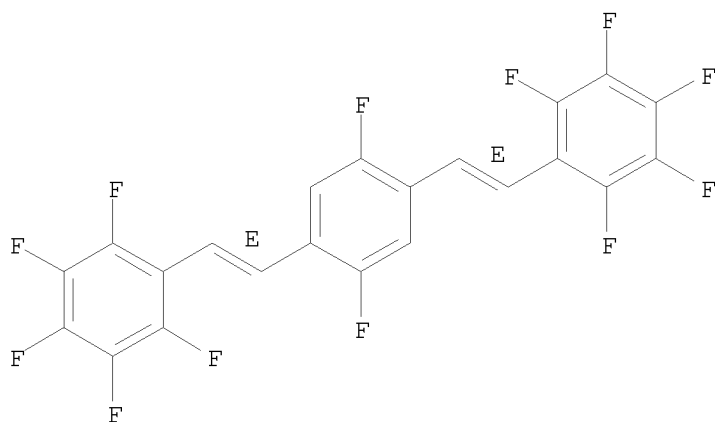
CN Benzene, 1,4-bis[(1E)-2-(pentafluorophenyl)ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 246258-72-0 HCAPLUS  
 CN Benzene, 1,4-difluoro-2,5-bis[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-  
 (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD  
 (9 CITINGS)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 17 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:473148 HCAPLUS

DOCUMENT NUMBER: 133:193711

TITLE: Preferential Cocrystallization among Distyrylbenzene  
 Derivatives

AUTHOR(S): Bartholomew, Glenn P.; Bu, Xianhui; Bazan, Guillermo  
 C.

CORPORATE SOURCE: Department of Chemistry, University of California,  
 Santa Barbara, CA, 93106, USA

SOURCE: Chemistry of Materials (2000), 12(8), 2311-2318  
 CODEN: CMATEX; ISSN: 0897-4756

PUBLISHER: American Chemical Society

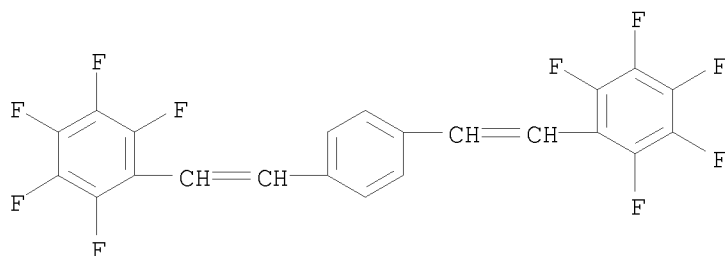
DOCUMENT TYPE: Journal

LANGUAGE: English

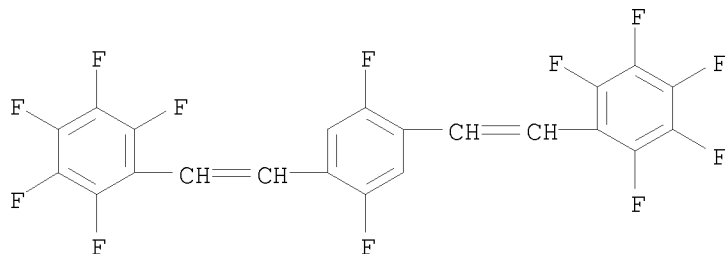
AB A combination of powder and single-crystal X-ray diffraction techniques  
 were used to probe the generality of phenyl-perfluorophenyl stacking among

a small library of 1,4-distyrylbenzene derivs. The specific derivs. in the present study are 1,4-bis-(4-dimethylaminostyryl)benzene (DMADSB), 1,4-distyrylbenzene (DSB), 1,4-di(1-cyano-2-phenylethenyl)benzene (CNDSB), 1,4-di(1-cyano-2-(4-methylphenyl)ethenyl)benzene (MeCNDSB), 1,4-bis(styryl)-2,5-difluorobenzene (2Fc), 1,4-bis(4-fluorostyryl)-2,5-difluorobenzene (2Fc2Ft), 1,4-bis(pentafluorostyryl)benzene (10Ft), and 1,4-bis(pentafluorostyryl)-2,5-difluorobenzene (2Fc10Ft). Electrostatic distribution diagrams aid in assessing the likelihood of success in pair formation. Powder diffraction provides a means to determine both pos. and neg. results for binary phase formation. Four new structures are presented and discussed including (DSB/2Fc10Ft), (DMADSB/2Fc10Ft), (CNDSB/2Fc10Ft), and (MeCNDSB/2Fc10Ft). Single-crystal diffraction work confirms that the resulting lattices contain alternating layers of fluorinated and unfluorinated DSB derivs. arranged in a cofacial fashion with multiple H...F interactions between stacks. Differential scanning calorimetry is reported on (DSB/2Fc10Ft), (CNDSB/2Fc10Ft), (MeCNDSB/2Fc10Ft), and their components.

IT 289666-37-1 289666-38-2,  
1,4-Bis(pentafluorostyryl)-2,5-difluorobenzene  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
PROC (Process)  
(preferential cocrystn. with stacking among distyrylbenzene derivs.)  
RN 289666-37-1 HCAPLUS  
CN Benzene, 1,4-bis[2-(2,3,4,5,6-pentafluorophenyl)ethenyl]- (CA INDEX NAME)



RN 289666-38-2 HCAPLUS  
CN Benzene, 1,4-difluoro-2,5-bis[2-(2,3,4,5,6-pentafluorophenyl)ethenyl]-  
(CA INDEX NAME)



OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS  
RECORD (23 CITINGS)  
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:276364 HCAPLUS  
DOCUMENT NUMBER: 133:58573

TITLE: Reactions of pentafluorobenzenesulfonyl chloride with alkenes in the presence of a ruthenium or palladium complex

AUTHOR(S): Kamigata, Nobumasa; Yoshikawa, Manabu; Shimizu, Toshio

CORPORATE SOURCE: Department of Chemistry, Graduate School of Science, Tokyo Metropolitan University, Tokyo, 192-0397, Japan

SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (1998), 134/135, 11-20  
CODEN: PSSLEC; ISSN: 1042-6507

PUBLISHER: Gordon & Breach Science Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:58573

AB The reactions of pentafluorobenzenesulfonyl chloride with styrenes in the presence of a ruthenium(II) phosphine complex and subsequent treatment with triethylamine were found to give (E)-1-aryl-2-(pentafluorobenzenesulfonyl)ethene in high yields. On the other hand, palladium catalyzed reactions of pentafluorobenzenesulfonyl chloride with styrenes in the presence of a base afforded modest yields of both (E)-1-aryl-2-(pentafluorophenyl)ethene and (E)-1-aryl-2-(pentafluorobenzenesulfonyl)ethene.

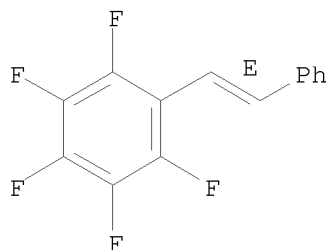
IT 19292-25-2P 37516-15-7P 106358-37-6P  
276689-80-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(reactions of pentafluorobenzenesulfonyl chloride with alkenes in the presence of a ruthenium or palladium complex)

RN 19292-25-2 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-phenylethenyl]- (CA INDEX NAME)

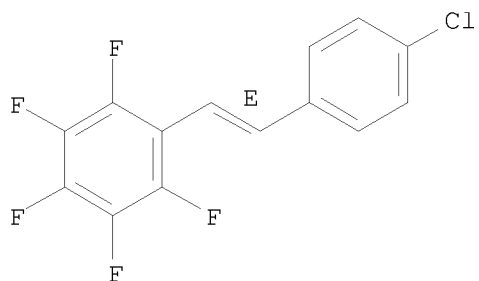
Double bond geometry as shown.



RN 37516-15-7 HCAPLUS

CN Benzene, [(1E)-2-(4-chlorophenyl)ethenyl]pentafluoro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

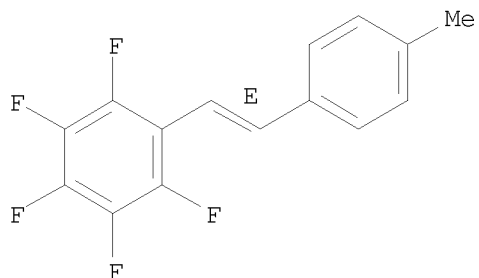


RN 106358-37-6 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-(4-methylphenyl)ethenyl]- (CA

INDEX NAME)

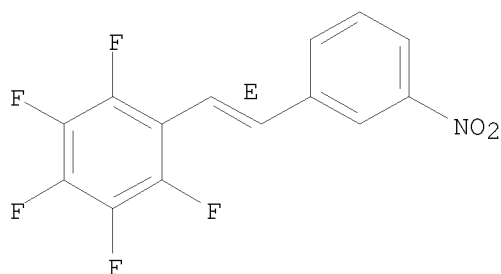
Double bond geometry as shown.



RN 276689-80-6 HCAPLUS

CN Benzene, 1,2,3,4,5-pentafluoro-6-[(1E)-2-(3-nitrophenyl)ethenyl]- (CA  
INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:245081 HCAPLUS

DOCUMENT NUMBER: 133:17850

TITLE: Packing Modes of Distyrylbenzene Derivatives

AUTHOR(S): Bartholomew, Glenn P.; Bazan, Guillermo C.; Bu,  
Xianhui; Lachicotte, Rene J.

CORPORATE SOURCE: Department of Chemistry, University of California,  
Santa Barbara, CA, 93106, USA

SOURCE: Chemistry of Materials (2000), 12(5), 1422-1430  
CODEN: CMATEX; ISSN: 0897-4756

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A range of 1,4-distyrylbenzene derivs. were synthesized and characterized by single-crystal x-ray diffraction to study the effects of substitution on the resulting crystal lattices. Mols. in this report include 1,4-bis(2,2-diphenylethenyl)benzene (1), 1,4-bis(1-cyano-2,2-diphenylethenyl)benzene (2), 1,4-bis(1-cyano-2-phenylethenyl)benzene (3), 1,4-bis(2,5-dimethoxystyryl)benzene (4), 1,4-bis(3,5-dimethoxystyryl)benzene (5), 2,5-difluoro-1-(pentafluorostyryl)-4-(4-tert-butylstyryl)benzene (6), and 1,4-bis(4-nitrostyryl)benzene.2DMF (7). The lattice of each is described

and contrasted in light of distyrylbenzene derivs. previously reported. The results of thermal anal. by DSC are included to further examine the effect of substitution on crystal properties.

IT 272766-42-4

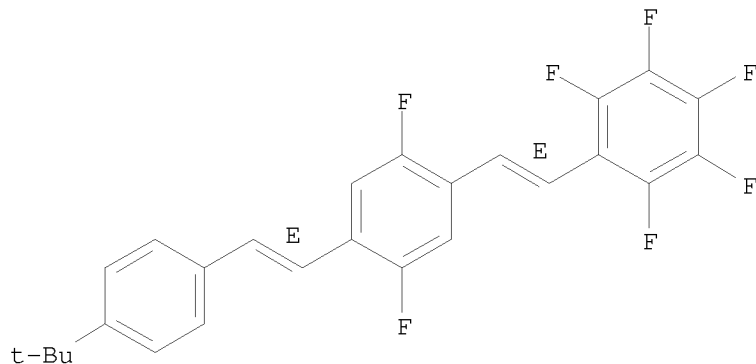
RL: PRP (Properties)

(crystal structure and packing modes of distyrylbenzene derivs. as model compds. for study of poly(phenylvinylenes))

RN 272766-42-4 HCAPLUS

CN Benzene, 1-[(1E)-2-[4-(1,1-dimethylethyl)phenyl]ethenyl]-2,5-difluoro-4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)  
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 87 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:13443 HCAPLUS

DOCUMENT NUMBER: 132:230805

TITLE: Vanadium [dicyanoperfluorostilbene]<sub>2</sub>·yTHF: a molecule-based magnet with T<sub>c</sub> ca. 205 K

AUTHOR(S): Fitzgerald, Jeffrey P.; Kaul, Bharat B.; Yee, Gordon T.

CORPORATE SOURCE: Department of Chemistry, United States Naval Academy, Annapolis, MD, 21402, USA

SOURCE: Chemical Communications (Cambridge) (2000), (1), 49-50  
CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A new radical anionic bridging ligand, derived from the in situ reduction of  $\alpha,\alpha'$ -dicyanoperfluorostilbene, is reported to support ferrimagnetic ordering <205 K in a three-dimensional vanadium-based coordination polymer.

IT 261172-48-9

RL: PRP (Properties)

(ferrimagnetic ordering in vanadium-dicyanoperfluorostilbene-THF mol.-based magnet with T<sub>c</sub> ca. 205 K)

RN 261172-48-9 HCAPLUS

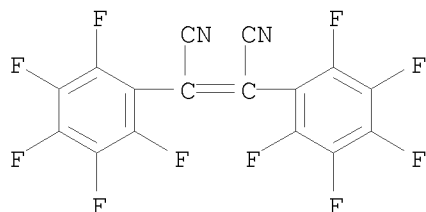
CN 2-Butenedinitrile, 2,3-bis(pentafluorophenyl)-, radical ion(1-), vanadium(2+), (2E)-, compd. with tetrahydrofuran (9CI) (CA INDEX NAME)

CM 1

CRN 261172-47-8



CMF C16 F10 N2 . 1/2 V  
CCI RIS



● 1/2 V(II) 2+

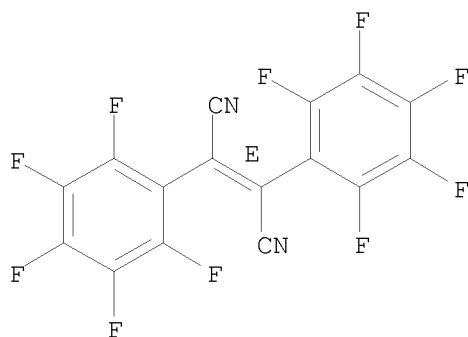
CM 2

CRN 109-99-9  
CMF C4 H8 O



IT 260809-77-6  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(vanadium complex; ferrimagnetic ordering in  
vanadium-dicyanoperfluorostilbene-THF mol.-based magnet with Tc ca. 205 K)  
RN 260809-77-6 HCAPLUS  
CN 2-Butenedinitrile, 2,3-bis(pentafluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT:	18	THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
REFERENCE COUNT:	14	THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.49

590.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-52.70

FILE 'REGISTRY' ENTERED AT 16:07:04 ON 07 MAY 2010

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 MAY 2010 HIGHEST RN 1221639-82-2

DICTIONARY FILE UPDATES: 6 MAY 2010 HIGHEST RN 1221639-82-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

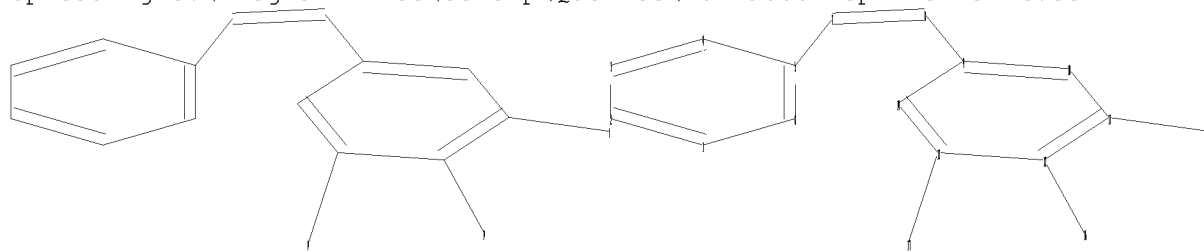
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10-790662 sp with 3f b.str



chain nodes :

7 8 15 16 17

ring nodes :

1 2 3 4 5 6 9 10 11 12 13 14

chain bonds :

5-7 7-8 8-9 11-15 12-16 13-17

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-14 10-11 11-12 12-13 13-14

exact bonds :

5-7 7-8 8-9 11-15 12-16 13-17

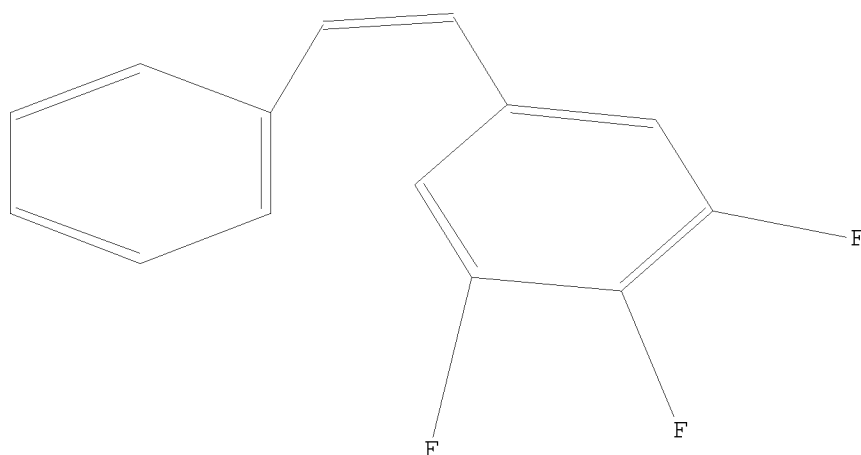
normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-14 10-11 11-12 12-13 13-14  
isolated ring systems :  
containing 1 : 9 :

Connectivity :  
10:0 E exact RC ring/chain 14:0 E exact C chain  
Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS

L11 STRUCTURE UPLOADED

=> d  
L11 HAS NO ANSWERS  
L11 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l11  
SAMPLE SEARCH INITIATED 16:07:28 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 112 TO ITERATE  
  
100.0% PROCESSED 112 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1606 TO 2874  
PROJECTED ANSWERS: 0 TO 0

L12 0 SEA SSS SAM L11

=> s l11 full  
FULL SEARCH INITIATED 16:07:34 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 2427 TO ITERATE

100.0% PROCESSED 2427 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L13 0 SEA SSS FUL L11

=> fil marpat

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

191.54

781.94

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-52.70

FILE 'MARPAT' ENTERED AT 16:07:40 ON 07 MAY 2010

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FILE CONTENT: 1961-PRESENT VOL 152 ISS 18 (20100430/ED)

MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20100063277 11 MAR 2010

DE 102008039167 11 MAR 2010

EP 2163551 17 MAR 2010

JP 2010060511 18 MAR 2010

WO 2010034153 01 APR 2010

GB 2463151 10 MAR 2010

FR 2935382 05 MAR 2010

RU 2383571 10 MAR 2010

CA 2678295 05 MAR 2010

The new MARPAT User Guide is now available at:

<http://www.cas.org/support/stngen/stndoc/marpat.html>.

=> s l111

L111 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s l11

SAMPLE SEARCH INITIATED 16:07:46 FILE 'MARPAT'

SAMPLE SCREEN SEARCH COMPLETED - 5226 TO ITERATE

38.3% PROCESSED 2000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 100894 TO 108146

PROJECTED ANSWERS: 0 TO 0

L14 0 SEA SSS SAM L11

=> s l11 full

FULL SEARCH INITIATED 16:07:53 FILE 'MARPAT'

FULL SCREEN SEARCH COMPLETED - 107481 TO ITERATE

100.0% PROCESSED 107481 ITERATIONS  
SEARCH TIME: 00.00.12

0 ANSWERS

L15 0 SEA SSS FUL L11

=> log h

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

135.98

917.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-52.70

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 16:08:53 ON 07 MAY 2010